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ABSTRACT

This paper reviews the theory and research related to the sex role socialization of young children, specifically addressing a range of theoretical and practical issues related to the implementation of the Women's Educational Equity Act. Section I examines the influence of the family on children's sex role development, focusing on differentiated shaping by sex and imitation of same sex models. Topics included are: (1) sex-typing pressure; (2) punishment, aggression and activity level; (3) dependence and independence; (4) achievement motivation; (5) toys; (6) siblings and birth order; (7) parental role differentiation and father dominance; (8) maternal employment; and (9) father absence. Section II deals with sex role and the mass media, with emphasis on the content of television programs and the effects of television viewing. Section III discusses the school's role in stopping its own sex-typing influence and in counteracting the sex-typed attitudes of its students. Implications for school programming and recommendations for further research are presented. A list of more than 150 references is included. (JMB)

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SEX ROLE SOCIALIZATION IN EARLY CHILDHOOD

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PREFACE

This paper presents a review of theory and research related to the sex role socialization of young children. Specifically, the paper addresses a range of theoretical and practical issues related to the implementation of the Women's Educational Equity Act.

The bulk of research examined in this report was conducted between 1970 and 1977. Work on this paper was completed in the spring of 1977. A comprehensive annotated bibliography, Sex Role Socialization in Early Childhood: An Annotated Bibliography is also available from ERIC/ECE. This bibliography contains an [redacted] references cited in this paper as well as approximately [redacted] related references.

PREFACE

This paper presents a review of theory and research related to the sex role socialization of young children. Specifically, the paper addresses a range of theoretical and practical issues related to the implementation of the Women's Educational Equity Act.

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SEX ROLE SOCIALIZATION IN EARLY CHILDHOOD

The Family and Sex-Role Development of the Child

The family exerts the primary influence on children's sex role socialization. There are two ways in which family interaction affects children's sex role development: (a) parents reward sex-appropriate behavior and punish or discourage sex-inappropriate behavior, and (b) children more frequently imitate same-sex models (especially the same-sex parent). This discussion is focused on assessing the sex role socialization experiences which the young child brings from home to preschool and early elementary school grades. Section 1 will deal with differentiated shaping according to the sex of the child. Section 2 will explore the question of the importance of imitation of a same sex model, particularly a parent in the sex-role socialization of children. In this section we shall include the effects of older siblings on younger sisters and brothers, role differentiation of parents, maternal employment, and father absence. Section 3 will present implications of our findings with special attention to school programming and outline three areas we consider especially important for further research.

I. Differentiated Shaping By Sex

The literature of the 60s and early 70s documented and discussed sex differences in the socialization of boys and girls by their parents (mostly mothers), e.g., Biller (1974), Lewis (1972), Kagan (1972), Lynn (1972), Weitzman (1975), Birns (1976), and the following examples cited by Block (in press): Hartley (1964), Hetherington (1965, 1967, 1972), Moss (1967), Mussen (1969), McCandless (1969).

In light of the evidence for the existence of differentiated socialization, the findings of the most inclusive recent review of the literature by Maccoby and Jacklin (1974) were indeed astounding. Although these authors find some areas in which overall differentiated shaping of behavior occurs, they conclude that "research on socialization of the two sexes has revealed surprisingly little differentiation in parent behavior according to the sex of the child." (p. 338)

Block (1976[a], 1976[b], and in press) takes serious issue with the conclusions of Maccoby and Jacklin. Block's reanalysis of some of the data presented by these authors as well as some additional data leads her (1977) to conclude that "we find considerably more evidence

of differentiation in parental rearing practices as a function of the sex of the child than is reported or summarized by Maccoby and Jacklin." (p. 43)

Sex-typing Pressure

Researchers agree that there are two major factors operating in sex role socialization: negative sanctions against sex-inappropriate behavior, and frequency of physical punishment. (Maccoby and Jacklin, 1974, Weitzman, 1975, Block, in press). According to the available research, boys experience more intense pressure in sex-role socialization experiences than girls in that they are subjected to many more negative sanctions from their parents for engaging in sex-inappropriate behavior. (e.g., Fling and Manosevitz (1974) and as cited by Lynn (1974), Riding (1972) and Lansky (1967). Girls have greater leeway to engage in boys sex-typed activities and to play with boys' sex-typed toys (e.g., Lynn, 1974: Fagot, 1974).*

Maccoby and Jacklin (1974) pointedly ask "Why is it that parents are more upset when a boy wants to wear lipstick or put on high heels than they are when a girl wants to paint a false moustache on her face or wear cowboy boots?" (p. 339) Several attempts have been made to answer this question. One explanation offered is that feminine behavior in a boy might augur homosexual tendencies (more prevalent in adult males than in adult females) leading to anxiety especially in the father (Maccoby and Jacklin, 1974). Another explanation is that the male role has higher status and thus parents are more reluctant for their sons to dip into lower status activities and manners than vice-versa; more appears to be at stake for boys than for girls.

A third explanation is that boys learn their sex-role proscriptively because they have less early exposure to male models. In other words, they must learn what to do and how to behave through rejection of the feminine. Hartley speaks of the "virtual panic boys have at being caught doing anything traditionally defined as feminine." (In Weitzman, 1975, p. 115)

It is interesting to contemplate the possible connection between the boy's early need to turn away from the feminine and his greater emphasis or sensitivity toward the peer group (Maccoby and Jacklin, 1974); (Bronfenbrenner, 1970, and Hallander and Marcia, 1970, both cited in Dweck and Bush, 1976). Girls, on the other hand, have been reported to be more responsive to adults in general than are boys (Maccoby and Jacklin, 1974). Although Maccoby and Jacklin consider

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*There is considerable evidence that boys are indeed more sex-typed than girls (e.g., Hartup and Moore, 1963; Ross, 1971; Ward, 1968, Pulaski, 1970; Wolf, 1973; cited in Maccoby and Jacklin, 1974, pp. 283-284).

the data bearing on this issue as offering weak support, Block (1976[b]) points out that the thrust of recent studies (1970s) omitted by these authors offers convincing support for the greater receptivity of girls to the demands of adults.

To the extent that these explanations are valid one would expect that if fathers become involved more and earlier in child care, and if the female role achieves higher status, the discrepancy between stress on sex-typing of sons and daughters should narrow. On the other hand increasing divorce and father absence (see Lynn, 1974 and Biller, 1974) should increase this discrepancy.

It is evident, though, that the male child comes to school having acquired a socialized need to reject female activities and toys, being more responsive to his peer group and less to his teacher, usually a female. Girls do not begin school with a similar need to reject male activities and toys and they are predisposed to be more responsive to adults. The major point for recall here is that boys experience greater pressure than girls to choose sex appropriate toys and activities.

Punishment, Aggression and Activity Level

The second area of agreement is that boys are physically punished more often than girls--a finding consistent over a wide range of ages and in different types of research. The findings regarding nonphysical forms of punishment (such as withdrawal of love, loud reprimands, etc.) are less clear. The majority of studies reported by Maccoby and Jacklin (1974, p. 333) show no sex differences. In the few studies in which there were sex differences they were split, with some indicating that girls received more. Block (in press) reports a greater reluctance of parents to punish daughters than sons. Maccoby and Jacklin (1974) cite a study by Minton, Kagan and Levine (1971) of children approximately 2 years old which showed that girls tend to obey the first commands more frequently than boys, causing mothers to escalate pressures on their sons. This creates a circular process, so that it becomes more difficult to influence the child with gentler methods. Another circularity occurs because boys more often than girls are exposed to more aggressive models which may account for further increases in their aggressivity (Lynn, 1974, pp. 204-205).

Kagan (1972) has pointed out that the correlation between mother's practices and the child's subsequent development is weaker for boys than for girls. Is this because boys are more resistant to mother's influence than girls are? Is it, as Kagan hypothesizes, because there is greater male variability in both maturational development and display of temperamental attributes? Are boys more resistant to father influence as well? Present data are insufficient to answer these questions. In brief, boys arrive at school with a history of greater amounts of

total punishment, especially more violent punishment. Thus they may be somewhat less affected by the punitive influence of teachers and principals. The following possible explanations are offered as to why boys are punished differently from girls:

a. Boys are generally less compliant than girls.
b. Boys are generally more aggressive.
c. Boys are thought to be hardier than girls.
d. Boys are more active than girls.

(a) Maccoby and Jacklin (1974) do report that girls tend to be more compliant with the demands of adults than are boys.

(b) One of the major consistent findings in terms of differences between the sexes is that boys are more aggressive than girls (Maccoby and Jacklin, 1974; Block, 1976[b]; Burns, 1976). Maccoby and Jacklin (1974) define "aggression" as refering to a "loose cluster of actions and motives," not necessarily related but with the central intent of one individual intending to hurt another. (p. 227). They summarize the findings as follows:

> The sex differences in aggression has been observed in all cultures in which the relevant behavior has been observed. Boys are more aggressive both physically and verbally. They show the attenuated forms of aggression (mock-fighting, aggressive fantasies) as well as the direct forms more frequently than girls. The sex difference is formed as early as social play begins--at age 2 or 2 1/2 (p. 352).

These authors make a strong case for greater innate propensity of males to aggressive behavior.

Boys' greater aggressiveness would tend to elicit greater total amounts of punishment and possibly more physical punishment. On the other hand, one might expect that greater degree of aggressiveness would be tolerated in boys than in girls.

Maccoby and Jacklin (1974) conclude from their review of studies regarding parental permissiveness for aggressive behavior that there is "no consistent picture of greater permissiveness toward boy's aggressive behavior" (p. 325). Most of the studies did not include fathers, and it has consistently been shown that there is an important cross-sex effect with fathers more tolerant of aggressiveness toward them by their daughters than by their sons (e.g. Rothbart and Block (in press) with the reverse not true. If there is a sex differential in permissiveness of aggression toward adults it is in favor of girls rather than boys. As suggested previously, the greater harshness

toward boys' aggressiveness may in turn stimulate further aggression in boys. These studies, hoewver, provide no observational data regarding parents' reactions to children's aggressiveness directed toward peers. It is indeed possible that boys are allowed more aggression in the peer context and, furthermore, there might be greater pressure for boys to relate aggressively in instances of defense. Further research would be needed to explore these possibilities.

It seems reasonable to suggest that although a superficial examination of the data suggests that boys' aggressiveness is not encouraged by parents, a deeper consideration suggests that there may be subtle ways in which parents may in fact be doing so. Boys are perceived by parents as being more aggressive than girls; parents do not find this to be a desirable trait, yet parents, especially fathers, seem interested in having their children appropriately sex-typed. It is indeed possible, therefore, that parental response toward aggression in boys reflects ambivalence either in inconsistency of punishment (with partial reinforcement leading to a greater strengthening of behavior than consistent reinforcement does) or in bi-level messages (overt disapproval and covert approval). Furthermore, as previously suggested, perhaps the greater harshness of the father toward son might stimulate further aggression in boys.

In other words, boys may be naturally more aggressive than girls, and despite parents' aroused disapproval of such behavior, the concern for proper sex-role stereotyping might foster such behavior in their sons more than in their daughters.

(c) Another possible explanation for the greater amounts of punishment boys receive is the prevalent view that boys can "take it" better for one reason or another (Maccoby and Jacklin, 197 , p. 332). Maccoby and Jacklin (1974) present evidence that infant girls up to age 5 months are treated by their parents as if they were physically more fragile than infant boys (Lewis, 1972; Moss, 1967; L. Yarrow, et. al (1971), and Tasch, 1952).

(d) Another possible explanation for the fact that boys receive greater amounts of punishment is that they are more active than girls and therefore more difficult to handle. Boys' activity level then, might place additional burdens on their caretakers, leading to more and more intense punishment. Are boys indeed more active than girls, and if so, at what ages does this become evident?

Activity level is used broadly to include measures of amount of gross-motor behavior, actomotor scores and overall ratings of activity (levels of energy and vigor in play). Thus size, intensity, and frequency of movements are lumped together.

Birns (1976) in a review article summarizes the findings as follows: "Up until the age of 2, neither the presence nor absence of early sex differences can be claimed with great convictions" (p. 238). Between age 2-5 "boys manipulate toys more and are more exploratory" (p. 242). Maccoby and Jacklin (1974) conclude that "during the preschool years, when sex differences are found they are in the direction of boys' being more active." These differences appear to be contextually determined, with boys "stimulated to bursts of high activity by the presence of other boys." (p. 353)

Block (1976[b]) reports the results of nine studies omitted by Maccoby and Jacklin. In each of these studies males were found to be more active than females.

It is interesting that Maccoby and Jacklin do not consider the hypothesis that boys after infancy are stimulated to be more active or allowed by their parents to be more active than girls. Block (in press) reports the results of a study using the Child Rearing Practices Report (CRPR), a questionnaire on child rearing orientations, values and techniques of parents of children ranging in age from 3-20 years over a wide variety of ethnic and socioeconomic backgrounds. Mothers significantly more often prohibited their daughters than their sons from playing rough games. There was a trend (p. 10) for fathers to do the same. Mothers significantly more often felt is was important for their sons as compared to their daughters to play outside. (The results for fathers were not significant.) These measures assess only two aspects of activity level, but they suggest that parents might encourage or accept higher activity levels in their sons.

In summary, it does appear that boys are more active than girls, especially in the presence of peers, and this energy can be channeled in various directions. It is not clear from the research what, if anything, parents do to abet or channel higher levels of activity in boys.

Dependence and Independence

It has been thought that activity level is related to independence; passivity is frequently pictured as a first cousin to dependency, one of the frequently mentioned female attributes thought to inhibit women's intellectual and creative potential. Mischel (1970) concludes that the body of research yields evidence which is not completely consistent but does seem to indicate "greater dependency, social passivity and conformity in females than in males" (p. 6).

In contrast, Maccoby and Jacklin (1974) conclude in their review of more than 75 studies that "there is very little difference between the sexes in the frequency or intensity with which dependent behavior

occurs (p. 323). A look at the operational definition of 'dependency' used by these authors will perhaps clarify this discrepancy. Maccoby and Jacklin include the following categories in their consideration of 'dependency': touching and proximity to parent, resistance to separation from parent, touching and proximity to nonfamily adult, proximity and orientation toward friends, positive social behavior toward nonfamily adult, positive social interaction with peers (Tables 6.1-6.5).

Maccoby and Jacklin failed to include some aspects of dependency which might indeed show important sex differences and have grouped together various types of behaviors obscuring possible sex differences. For example, in their table regarding positive social behavior toward nonfamily adults, they include studies measuring such divergent responses as bids for adult attention, willingness to help the teacher, affection to staff, etc. Yet they did not include studies in which sex differences in specific requests for help and reassurance were investigated. Block (1976[b]) discovered 13 studies omitted by Maccoby and Jacklin, all indicating greater dependency in girls. She summarizes these findings as follows: "girls manifested more dependent behaviors in the sense of seeking help and/or information, maintaining closer proximity to teacher or home or scoring higher on dependency scales in standard inventories (p. 300).

A recent study by Fagot (1974) similarly found that 3-year-old girls asked for help more frequently than boys. It is indeed possible that girls do not seek physical closeness to parents or more frequently seek or respond to adult or peer attention, but that they are more likely to ask for certain kinds of attention from adults or other children, i.e., both in the realm of specific task help, information and feedback (generally referred to as "instrumental dependency"), and in the realm of what is called "expressive dependency," which includes reassurance, approval (Marcus, 1975). It is in the latter area that recent feminist literature has claimed that female casualities lie, i.e., girls are more dependent on adult approval and appraisals and do not develop a sufficiently independent sense of self (e.g., Bardwick, 1970). It is likely that this is an important aspect upon which raters base decisions regarding global measures of dependency (omitted from consideration by Maccoby and Jacklin). Interestingly enough, Block (1976[b]) points out that females do tend to score higher on Social Desirability scales (7 out of 9 studies).

The suggestion that girls are possibly more dependent in some major ways, i.e., asking for specific help, or seeking out the approval of others, is consonant with the findings that Maccoby and Jacklin (1974), p. 89) report that teachers ratings and self-reports show girls to be more timid and anxious in general than boys. Overt behavior

observations did not reveal such a sex difference. Of specific interest in the school context is that in 5 out of 8 tabled studies of test anxiety, females were found to be more anxious than males. (See Block's critique of Maccoby and Jacklin, 1976b.) The possibility that girls might simply be more willing to reveal their fears and anxieties does not eliminate the importance of the finding, since self-perception is important in itself.

In addition to the need for a thorough look at each of those aspects of dependency not included by Maccoby and Jacklin, it would seem important to consider that boys and girls might vary in their patterning of various aspects of dependent behaviors. There is some general evidence to support such a notion (Maccoby and Jacklin, 1974, p. 142), but further study is necessary. In addition, future research should aim at assessing sex differences in "independent" as well as "dependent" behaviors.

It has also been proposed that the very manner in which sex-role socialization occurs in boys and girls disposes girls to be more dependent than boys. Lynn (1972) suggests that because mother is the primary child care person, the girl can learn her sex role as "lesson learning," i.e., copying from mother's behavior; or being reinforced for feminine behavior by a relatively highly sex-typing father. (Lynn, 1974, pp. 153-156). Boys, on the other hand, must shift their primary identification away from mother and abstract the male role from the less readily available father, from TV and from peers. A boy learns what he should not do in a relatively punitive manner (Hartley, 1972) and must infer what is required of him. Thus girls learn their sex-role in a dependent relationship whereas boys are encouraged to turn away from their primary care-taker to abstract their sex role. The importance of Lynn's proposal is that it suggests that it is not only what the parents do which fosters dependency in girls, but the inescapable sex-differentiated way in which sex-role is acquired that results in sex differences in this sphere. It suggests that as long as the mother or another female are the primary caretakers in the early years (with the father or other males relatively unavailable to the child) and as long as sex roles must be clearly differentiated, these undesirable effects on the dependency behaviors of girls will hold true. The reasons for this behavior may be that girls develop their sex roles in a passive-dependent manner emphasizing the lack of separation from parents as sources of support and nurturance and they develop a sense of self largely based on the appraisals of others. Support for this proposal is given in an interesting study by Domash (1973). She found that mothers who were more sex-typed in their child-rearing attitudes had daughters whose personalities were more undifferentiated from those of mother than mothers who were more androgynous in their outlook. No correlation was found for mothers'

sex-typing propensities and boys' degree of differentiation. This suggests that if mothers are less sex-typed in their attitudes girls will have a greater chance for differentiation.

Do parents indeed actively foster dependency more in their girls than in their boys? Do they actively promote independence more in their boys than their girls? It is not easy to determine the answers to these apparently simple questions. Problems of defining and measuring 'dependency' and 'independence' occur. Furthermore, it is not always easy to assess what types of parental handling will foster dependency as opposed to abetting independence. For example, it is generally considered in the sex-role literature that if the parent during the early years responds more to pleas for help from girls than from boys, it would indicate that parents are willing to encourage their daughters to be more dependent than their sons. Some theories of personality development would challenge this view. The Freudians and neo-Freudians, for example, would content that early and appropriate satisfaction of dependency needs enables the child to become more independent rather than less so (e.g., Eriksen, 1964). Thus, reinforcement for dependency at one age may foster later independence, whereas the same type of reinforcement at another age might abet dependent behaviors.

Another problem is that there are many possible ways parents can respond to dependency appeals (actively encouraging and instigating dependency; reward such behavior when it does occur; punishing moves toward independence, or on the other hand, punishing dependency and rewarding independence). All these ways should be examined for an accurate view of socialization practices. Maccoby and Jacklin (1974) take an important first step in attempting to find an answer to the question of whether parents foster dependency more in their girls than in their boys. They consider parental restrictions (low encouragement of independence) and the reward (permissiveness for dependency separately).

Parental Restrictions. Let us first look at the restrictions parents place on their sons and daughters. Maccoby and Jacklin conclude that "during the preschool years there is a trend in some measures toward greater restriction of boys, but the findings from study to study are not consistent, and the bulk of the evidence is that there is little or no difference in the socialization of boys and girls when it comes to independence-granting." (p. 319). Such findings are consistent with the punishment data reported above but do not conform to the hypothesis that girls are discouraged from "asserting themselves."

A close look at the tabulated results of 23 studies provided by Maccoby and Jacklin suggests that some important differences might have been masked by grouping together restrictions on various types of behaviors, the identities of the limit setter (mother or father) and measures of overt behavior as well as answers to questionnaires regarding child-rearing practices.

There appear to be three basic types of behaviors which parents attempt to control (excluding aggression and competition which are considered separately): (a) behaviors which might be dangerous to the child, (b) behaviors which involve exploration and initiative in handling objects or people and (c) behaviors which involve structures about neatness, care of property, etc.

(a) A brief examination of these studies suggests that when there is a sex difference in parents' reaction to behaviors which might endanger the child, there is a tendency by either parent to be more protective of daughters (e.g., Minton, et. al., 1971; Tasch, 1952; Pedersen and Robson, 1969, all cited in Maccoby and Jacklin, 1974.) This contention is further supported by Block (in press). Both mothers and fathers reported that they were significantly more willing to "let their sons take chances" than their daughters.

The usefulness of distinguishing between the various types of behaviors to be restricted is illustrated in a study by Minton, et. al (1971) cited by Maccoby and Jacklin (1974). At 27 months, mothers were more likely to be concerned about the physical danger to their daughters than to their sons and there was a trend for mothers to give more simple prohibitions to their sons than to their daughters.

(b) Independence-granting in regard to exploration yields less clear evidence of sex differentiation. However, here again, specificity as to the particular behavior under study might help to illuminate the issues. Saegert and Hart (1976) have defined a particular aspect of exploratory behavior, i.e., spatial freedom or freedom of physical mobility. They point out that "Few of the studies reviewed by Maccoby and Jacklin included investigation of parental restrictions and punishments regarding spatial range and then only as one question among many given to parents. Also, most of the studies relied on parental interview and of those few which observed behavior, it was only for brief periods in home or in a nursery school." (p. 4). Furthermore, Saegert and Hart point out that a look at three studies omitted by Maccoby and Jacklin suggested significantly more liberal definitions of spatial range for boys than for girls.

(c) Restrictions of freedom in caretaking activities, focus on a very different set of variables. Girls have been thought by parents to be neater and more careful than boys (Lambert, et. al, 1971 and Smith, 1971, in Maccoby and Jacklin, 1974). Neatness and care is

also thought to be more important for girls than for boys. Parental strictness can thus be greater for either boys or girls for different reasons. Furthermore, because of different expectations regarding boys' and girls' behaviors in this area, criticism and restrictions probably would have different meanings to boys and girls, with small criticisms looming large in the minds of girls.

In addition to the use of an overly broad, undifferentrated conception of independence-granting, sex differences may be further obfuscated by lack of consistency in the use of measures, which makes cross-validation difficult, and lack of data on father/child dependency relationships. Studies in this area have shown differential responding by fathers and mothers (e.g., Block, 1972; Nakamura and Rogers, 1967; Baumrind and Black, 1967 all cited in Maccoby and Jacklin, 1974). Studies have shown differences in objective vs. questionnaire responses within the same study indicating that parents may not be aware of what they are actually doing (e.g., Baumrind and Black in Maccoby and Jacklin, 1974).

Further study must tease out possible sex differentiated handling of independence behaviors by looking at more clearly defined specific types of behavior. The inclusion of fathers should be encouraged and both questionnaire and observational data within the same study would be important.

In brief, it does seem that there is tentative evidence suggesting that parents restrict their daughters more than sons in regard to dangerous behavior and spatial freedom; control of other independence-seeking behavior is less clear.

Parental Reward of Dependency. A look at parental "encouragement" of dependency again suggests the problem of an overly broad definition of dependency behavior, which again might explain the lack of a sex differential in parental response to dependent behaviors in their children (studies reviewed by Maccoby and Jacklin, 1974, Table 96).

A useful distinction in types of dependent behaviors is made by Marcus (1975). He refers to "instrumental" dependency, i.e., covert bids for help regarding materials and information, or task-oriented bids for help, and "emotional" dependency which includes bids for reassurance, approval, etc.

A brief re-examination of Maccoby and Jacklin's Table 9.6, compiled with reports of additional parental interviews mentioned by Block (in press) tentatively suggest that girls are allowed more comfort-seeking behavior. However, the studies where such a discrimination may be made and examined are few. In a related area, Block (in press) found (using the CRRR) that fathers and mothers expressed

and allowed physical closeness more with daughters than sons and more often encouraged sons to control their feelings.

The results regarding parental reactions to instrumental dependency are unclear and require further study, especially since this is an area of crucial importance to the school.

Do parents indeed reward task helplessness in their daughters more than in their sons? Do they in this way promote a relative feeling of lack of task competence in their daughters? Are different types of assistance given to boys than to girls by their parents? Do both sexes receive the same type of task information?

Another question of importance that cannot be answered at present is whether parents reinforce girls in ways which promote dependence on parental approval. Dweck, et. al (1975) in a school setting found that "positive evaluation was used more specifically for boys than girls to refer to the intellectual quality of their performance," implying that work-related praise is more likely to be seen by boys as an assessment of their intellectual ability, especially in view of the greater amount of negative evaluation they receive for other aspects of their behavior. In contrast, work-related praise is more likely to be seen by girls, compared to boys, as resulting from the positive attitude of the teacher or as referring to nonintellectual aspects of performance" (p. 26). Do the greater amounts and more widespread use of negative feedback for boys (Maccoby and Jacklin, 1974) coupled with more specific positive work-related response, leave them relatively free from dependency on parental approval while girls receiving more focused negative feedback and more diffuse positive feedback become more sensitive to parental approval? A careful look at the nature of reinforcement contingencies for boys and girls in the home might give an added understanding to the meaning of dependency for girls as sensitivity to adult appraisals.

To summarize, it is indeed possible that parents are differentially shaping dependency behaviors in their sons and daughters but, until we have a body of studies in which the type of behavior under research is clearly defined, reliable conclusions cannot be drawn. We have suggested that further study classify independence behavior into three categories: (a) behavior which may endanger the child in some way, (b) behavior involving caretaking activities. Dependent behaviors must similarly be more clearly defined. Two principal categories have been suggested, instrumental dependency (task-help) and emotional dependency (comfort, reassurance). It has further been proposed that a specific look at total positive-negative reinforcement contengencies in the home may shed light on sex-differentiated approval needs in boys and girls, i.e., in other words, girls' greater need for adult approval may relate to differentiated patternings of reinforcements rather than being specific to dependency bids.

Achievement Motivation and Expectations

Sex differences in various areas of intellectual ability have been documented from early childhood through adulthood (Maccoby and Jacklin, 1974) with few unequivocal findings in early childhood. With the onset of adolescence, marked differences begin emerging, with boys excelling in mathematical and visual-spatial abilities and girls excelling in verbal ability. It has also been well documented that, in spite of the fact that girls tend to receive higher grades and to be more diligent in their schoolwork throughout their schooling, they do not surpass boys in actual achievement (Lynn, 1972; McCondlers, Roberts and Stornes, 1972; Maccoby and Jacklin, 1974) and reveal less confidence in their ability. By the time they reach college age, there are marked differences in the level of achievement, professional aspirations, confidence in ability and general self-esteem (Maccoby and Jacklin, 1974; Stein and Barley, 1973). Differences in achievement between boys and girls from adolescence on may be attributed to:

(1) differences in motivation;
(2) differences in expectations for achievement;
(3) differences in attributions of success and failure;
(4) differences in career aspirations;
(5) differences in socialization experiences (father and mother roles); and Objective, institutional and societal norms.

Differences in Motivation Needs. Maccoby and Jacklin (1974) have indicated that some of the presumed traditional differences between the sexes in achievement-motivation are not consistently and unequivocally supported by the research findings. Thus boys have not been found to have a greater need for achievement at the school level; they do not consistently show greater task-involvement or persistence; girls have not empirically been found to be consistently more "person-oriented," nor boys more "task-oriented;" neither have the two sexes been shown to respond differently to experimentally evoked social or non-social reinforcement. Two findings have however been consistently supported: (a) that boys are more positively motivated by competition, and (b) that they are more responsive than girls to peer pressure as opposed to adherance to adult norms (Bronfenbrenner, 1970). Thus boys and girls are motivated differently by male and female adults and peers, depending on the interpretation of the feedback and the specific conditions under which the task is conducted. For girls, peer criticism tends to enhance performance while adult criticism results in improvement, negative reinforcement from peers proves shattering. A further note should be made of the different implications of adult reinforcement for adult and peer approval, for boys it might be necessary to violate adult standards of socially desirable behavior in order to gain peer approval.

However, it should be emphasized that both peer pressure and need for adult approval are "social" reinforcers and that boys and girls are motivated by a need for "social approval" whatever the source.

It is clear that in order to explain the divergence between traditional beliefs about achievement needs in males and females and actual empirical evidence, there is a need for more situationally specific research with clearer operational definitions.

Differences in Expectations for Success. Most studies on sex differences point to a difference in self-esteem with both adult males and females, boys and girls valuing males more than females and attributing lower esteem to females (Bardwick, 1971; Broveman et. al, 1972; Mischel, 1974). It is interesting to note that while self-ratings of personal characteristics on standardized self-esteem scales do not reveal significant sex differences in self-esteem, males and females differ vastly in their confidence in predicting performance on a variety of tasks, independent of their actual skills, past experience or ability (Crandall, 1969; Maccoby and Jacklin, 1974). Parsons et. al., (1976) have analyzed these sex differences in achievement-related expectances, proposing a cognitive-developmental interpretation to explain the sex differences from the time children enter school (which coincides with the onset of concrete operations). Few objective differences have been found in abilities in boys and girls before the onset of early adolescence and those that do appear to favor girls (Maccoby and Jacklin, 1976). It would appear that the major source of different expectancies for success must be largely subjective, based on perceptions of, rather than actual attributes, i.e., the perception of expectancies of significant others; perceptions of one's own ability; and emerging causal attributions for success and failure. Cognitve-developmental theorists suggest that children arrive at a self-concept and sex-role identity on the basis of the way they perceive the attitudes and behaviors of those around them (Kohlberg, 1966). By age 5, children have developed clearly defined sex-role stereotypes regarding appropriate behaviors, traits and expectancies (Williams, Bennett and Best, 1975). Thus males are seen as strong and competent, females weak and incompetent. Acceptance of these stereotypes implies differentiated assumptions about success for the two sexes, and thus different (and lower) expectancies for female performance.

Broverman et. al (1972) in their study of current sex-role stereotypes, conclude: (a) that a strong consensus about the differing characteristics of men and women exists across groups which differ in sex, age, religion, marital status and educational level; and (b) that the characteristics ascribed to men (competence, rationality and

assertion) are positively valued more than those ascribed to women (warmth, expressiveness). It should be noted that sex-role differences are considered desirable by college students and by mental health professionals alike (Rosenkrantz, 1968). It should be noted too that the "masculine" traits are more highly valued in our society, and that the "ideal adult" is closer to the "ideal male" than the "ideal female." It is not surprising therefore, that from a very young age, boys and girls adopt different evaluative judgments about the relative worth and potential of males and females and different expectations about their likelihood to succeed in achievement-related fields.

Attributions of Success and Failure and Its Meaning. One line of research has attempted to explain differences in expectancies of success or failure to internal or external "locus of control" (Rotter, 1970). While a positive relation has been found between internal locus of control and achievement, it has not been consistently shown that there are sex differences in locus of control (Maccoby and Jacklin, 1974) in grade and high school children. There is a trend for college women to attribute their achievements more to factors other than their own skill and hard work. With regard to power and personal strength, from early grade school years boys have a greater sense of potency, and both boys and girls perceive boys as stronger, more powerful, and dominant (Omark, 1973).

Another attributional theory to explain sex differences in prediction of outcomes is that of "learned helplessness" (Dweck, 1976). "To the extent that an individual in a failure situation sees his behavior as irrelevant to his subsequent outcomes--that individual may be said to display learned helplessness." Boys and girls have been found to differ in their attributions of success and failure, with girls attributing their failures more to uncontrollable or invariant factors (e.g., lack of ability, task difficulty, other people) and their successes to luck, whereas boys tend to attribute their failure more frequently to controllable factors (such as effort, luck, etc. and their successes to ability). (Dweck and Repucci, 1973; Nicolls, 1975; Dweck and Gilliand, 1975). These attributions of success and failure are established early in life by attitudes of parents and reinforced by teachers, mass media stereotypes and other learning situations. Valle (1974) suggests that "females' lower expectancies feed into a particularly debilitating pattern," and once an expectancy pattern has been established, later experience will be interpreted in such a way as to minimize changes in expectations. Thus, if one has expectancies of failure, but succeeds, by attributing success to luck, one can maintain the low expectancy. If one expects to fail, and does so, an attribution of lack of ability would be congruent with initial expectancies (in Parsons, et. al, 1976). Since females more consistently fall into this pattern, their "failure dynamics" might explain lowered expectancies.

One of the most significant barriers to female achievement is that of the conflict and ambiguity associated with her dual role as wife-mother and as employee in the "world of work." Broverman (1972) et. al have indicated that traditional sex-role stereotypes largely persist in spite of changes in the last few years, and by cultural, societal definition the most salient and valued role of women is still that of home-maker (wife and mother). If a woman chooses to work, certain traditional "feminine" characteristics (non-aggressive, affective, child-oriented, etc.) are prescribed by the social norms. Intellectual and professional achievement are regarded as incompatible with feminity, and women who have attained professional success are viewed as deviants (Weitzman, 1975).

Horner (1976) has pointed to the double-bind of the bright woman, and poses the "fear of success" as inevitable outcome. Femininity and individual competitive achievement are seen as two desirable but mutually exclusive goals, and "competence in intellectual matters or decision-making prowess have been equated with qualities antagonistic to or incompatible with, those defined as feminine." The paradox is that both "men and women are equally exposed to and immersed in a culture that, until very recently at least, rewarded and placed a high value on achievement and stressed individual freedom, self-realization and the full development of one's individual resources, including their intellectual potential." This is in direct contradiction to the hidden, and sometimes not so hidden, dictates of the social stereotypes which have been internalized and learned by both sexes at a young age. For women, then, the desire to achieve is often contaminated by the "motive to avoid success" or "fear of success." Some women may become anxious about achieving success because of the expectation of negative consequences (such as social rejection and/or feelings of being unfeminine). Thus, "while legally opening its doors to women, society has at the same time been 'teaching' them to be anxious about succeeding." The outcome is a "negative inhibitory tendency against the expression of the positive tendency to achieve success and/or be defensive about them" (Horner, 1972).

Bem and Bem (1970) have suggested that the sex-role belief system operates in at least two ways to restrict female life styles. "First, given a thorough socialization experience, the woman may never consider roles other than the traditional ones of wife and mother. Typically, socializing agents do not present alternative attitudinal-behavioral models nor do they require the child to question the validity of her beliefs. Therefore, this ideology is internalized by a woman unconsciously, as fact rather than opinion, and the restrictions it places upon her self-development may be accepted as normal and irrefutable." (As quoted by Horner, 1972).

Condry and Dyer (1976), however, refute the validity of this theory, contending that fear of success is not consistently more common in women, and that this characteristic is not acquired early in life (as suggested by Horner) but rather appears at the college level. Condry emphasizes rather the importance of social norms and the intrinsic social reward structure that places positive value on adherence of the norm and negative value and consequences for deviating from traditional sex-role standards, exists for both males and females and will motivate both sexes to avoid success when such success conflicts with social norms relating to traditional sex roles. Darley (1976) points to the disparity between what our formal education system is designed to prepare children to do as adults and what they will actually be doing. Educational preparation is more compatible with activities involved in the stereotype male role than with the stereotype female role. Both career women and homemakers will be facing ambiguous situations for which they are inadequately prepared. In the first, there is the conflict between their preparation for academic achievement and societal (conscious or unconscious) censure of achievement for some; in the second, there is the additional lack of preparation for the demands and skills of the homemaker role.

Career Aspirations. It is not surprising that males and females differ vastly in their choice of careers and after-college occupations. Many studies have been done on the vocational aspirations of boys and girls, pointing to the influence of societal expectations on their decisions about their futures and their expectations of adulthood (Looft, 1971). A distinction should be made between studies which ask children "What would you like to be?" and those asking "What do you expect to be?" Several studies have indicated that while many girls aspire to non-traditional occupations (doctors, professors, etc.) their expectations for adulthood are different and shaped by societal expectations (Looft, 1971; Hamsel, 1971, Iglitzin, 1972). Even when girls did express non-traditional career aspirations, when they were asked to describe a typical day in their grown-up lives, they tended to concentrate on traditional care-taking roles and neglect their careers. In studies asking school children to rate a series of jobs as better suited to males, females or both, it was noted that stereotyping was common for both boys and girls, although the trend was less prevalent for girls. Both boys and girls saw personality traits as distinct and along traditional lines, with girls seen as kinder, better behaved, more serious, and boys as more aggressive and dominant. The pattern of traditional sex typing which emerged carried over into career aspirations and descriptions of their lives as adults. While boys wanted to be craftsmen, engineers, scientists, professionals, sportsmen, pilots, girls wanted to be teachers, artists, nurses and stewardesses. (Iglitzen, 1972). It should be noted that for children of working or professional mothers,

there was less stereotyping and less adherence to traditional occupations, pointing to the importance of active, non-sex-typed models, and the possibility that sex-role stereotypes may be subject to change where a variety real-life models exist to counterbalance the indoctrination of the mass media and societal reinforcements.

Socialization Experiences: Role of Mothers and Fathers. Different levels of achievement in men and women have been posed as partially the result of implicit social reinforcement about appropriate sex-role expectations. Although Maccoby and Jacklin (1974) have contended that there are no consistent differences in the socialization of boys and girls in the achievement domain, Block (1977) suggests that this is a function of the failure to study fathers' behaviors in the achievement-relevant context. For boys and girls the mother is usually the first strong attachment object; but as indicated above, boys and girls undergo different socialization experiences. For the girls, modeling of the mother and maintaining an identity with her is consistent with her own sex role. For boys, however, some separation from the mother is encouraged after the first six months. If the hypothesis that coping with the environment independently is crucial in the development of feelings of competence and self-confidence, then boys are being encouraged to achieve this at an earlier stage than girls.

Traditional identification theory has assumed that identification with the same sex parent was most crucial in determining sex-role identification in the child. Weitzman (1975) however contends that sex-role identification evolves not only as a result of imitation and modeling of actual (same-sex) behavior but also from active interaction with the opposite sex. Thus, it can be agreed that fathers teach their daughters how to be female as much as mothers do. Block (1977) has emphasized the importance of taking into account both mother and father influences with respect to the particular contribution of each parent to the socialization process.

Fathers and mothers tend to differ in their relative emphasis on cognitive achievement in boys and girls. Thus while mothers tend not to differentiate between boys and girls in their pressures, for achievement, fathers differentiate markedly, placing more emphasis on their son's achievement and emphasizing cognitive-irrelevant elements with their daughters (interpersonal aspects, lowered aspirations, etc.) Block, 1977. The authors conclude that (a) cognitive achievement may be a less salient socialization domain for mothers relative to fathers, (b) that mothers are less sex-differentiating in their pressures for cognitive achievement, and (c) fathers tend to be more pressuring of their sons for cognitive achievement than of their daughters. These results emphasize the importance of taking into account the socialization dictates of both parents on shaping the achievement-motivation of the child.

Several studies have pointed to the relationship between cross-sex identification and cognitive style and achievement. Fathers have been shown to play a particularly significant role in the achievement motivation of their daughters (Lynn, 1974; Biller, 1974; Lazoff, 1975). Thus, high paternal expectations in the context of a warm father-daughter relationship are conducive to the development of autonomy, independence, achievement and creativity among girls. The role of the father in high achieving, successful women in non-traditional occupations has been shown to be particularly important, especially when paternal approval is conditional on high performance level. McClelland (1976) argues that similarly, strong mother-son relationships (in which approval is dependent on achievement) are particularly conducive to masculine achievement. In general, fathers seem to offer more non-conditional acceptance of their daughters and emphasize stereotype sex-typing which is not conducive to, and may be contrary to, high achievement motivation.

Biller (1974) has pointed to the role of the father in cognitive and academic functioning. Inadequate fathering and/or paternal deprivation are frequent in the background of academic underachievers. Positive paternal involvement has been said to facilitate girls' as well as boys' cognitive development, particularly persistence, achievement motivation, and assertive, analytical problem-solving behavior. Paternal rejection seems related to deficits in females' functioning in certain types of cognitive tasks. On the other extreme, highly nurturant fathers who reinforce feminine stereotypes (passivity, timidity, dependence) might inhibit their daughters' achievement potential. As Biller emphasizes, the quality of the father-child relationship, the father-mother interaction, and the role model father and mother are providing are all significant in achievement motivation in their offspring.

Objective and Structural Factors and Achievement Motivation. As has been well documented, there is an inverse relationship between sex-role ideology and achievement aspiration (Bem and Bem, 1975, Frazure, 1974). However, even when women have not internalized traditional sex-role appropriate behavior, there are objective barriers to female participation in the labor force. Parsons, et. al (1976) have noted that the percentage of women in professional and technical occupations decreased from 42% in 1950 to 39% in 1972. During the same period the percentage of women among clerical workers increased from 59% to 75% (U.S. Dept. of Labor, 1972). This is even more striking in view of the fact that an even larger percentage of working women are college graduates. Zellman, et. al (1976) have analyzed the structural barriers to female institutional participation, and conclude that "key institutions reward masculine values of competitiveness, aggressiveness, independence and rationality." In addition, work place rules and norms are designed to be compatible with men's but

not women's family responsibilities, demanding continuous work life and dedication, both emotional and physical. Most women's labor force participation is not continuous, and is geared to the family cycle (Oppenheimer, 1973), with a high employment level for married women between ages 20-26 and 45-54 and a notable decline in employment in the 25-44 age group (Gold, 1973). Inadequate child care facilities, sex discrimination and sex segregation, keeping women in lower status, lower salary jobs, of on-the-job training, etc. only serve to reinforce the more subjective, psychological barriers to high achievement motivation in young girls and women. Modification of institutional and structural norms might prove beneficial to both men and women, and offer more realistic choices to growing boys and girls for making life-decisions on the basis of personality and intellectual, rather than sex-determined, variables.

It is not surprising, then, that from early childhood on, girls and boys have differing expectations for success and achievement in different spheres. Educational preparation is more compatible with the activities involved in the stereotype adult-male role than with the stereotype female role. While academic achievement is highly valued for both boys and girls at the school level, the expected adult roles differ vastly: for girls, achievement becomes more appropriate in the direction of social interactions and homemaker skills; for boys, achievement is increasingly geared to their future work life. As Weitzman (1975) has noted, many women may acquire success and achievement in informal and non-operational areas (philanthropy, participation in civic and school affairs, responsibility in religious or recreational organizations, creative pursuits). However, in American society, status is closely related to monetary rewards which generally come from occupational achievement. In order to acquire high value, women have to enter the more prestigious and financially lucrative occupations yet they are neither socialized for such occupations nor expected to enter them.

It is only by changing many of the elements contributing to the sex-role belief system that sex differences in achievement motivation in males and females will be reduced and individuals may be motivated to realize their actual and not their ascribed potential.

Toys

One of the major ways in which parents encourage sex-typed behavior in children is through the selection of toys. Research on the play behavior of children under the age of 14 months found either no sex difference, or sex differences were not related to sex-role stereotyping. (Brooks and Lewis, 1974; Kaminshi, 1973; Goldberg and Lewis, 1969; Messer and Lewis, 1972; Jacklin, et. al, 1973; cited by

Maccoby and Jacklin, 1974). For example, there were no differences between boys' and girls' interest in manipulable toys or in soft furry toys. It is interesting that studies of children beyond age 2 repeatedly show sex differences in the predicted direction, with girls preferring domestic-type toys and art work, and boys preferring trains, cars, blocks, etc. (Pedersen and Bell, 1970; Clark et. al, 1969; Fagot and Patterson, 1969; Whiting and Pope, 1974; Schwartz, 1972; Emmerich, 1971; Wholford, et. al, 1971; DeLucia, 1972; Laosa and Brophy, 1972; Ward, 1969; Libert, et. al, 1971, cited in Maccoby and Jacklin, 1974). There appears to be little research on sex preferences of children between the ages of 14 months and 2 years; yet it is apparent that this should be precisely the time when sex-typing of toy choices takes hold. A recent study by Fein, et. al. (1975) found that at 20 months children's toy preferences matched adult sex stereotypes both in free play and in a modeling situation; girls preferred girl toys and boys, boy toys.

Similarly, Fagot (1974), studying middle class toddlers 18-23 months, found sex-typed toy choices and play behavior, boys playing more with blocks and manipulated objects and while girls played with dolls, danced and dressed up significantly more frequently. It is interesting to recall here that studies dealing with gender labeling have set 18 months to 2 1/2 years as the critical period, when change of sex ascription in order to correct initial error begins to become psychologically untenable (Green, 1974). So even before the child enters preschool, he/she is already prone to choose sex-typed toys and activities. Furthermore, by age 4, boys are fairly consistently shown to be more sex-typed than girls (Maccoby and Jacklin, 1974), avoiding sex inappropriate activities and choosing activities associated with their own sex. (Tomeh, 1975, pp. 16-17).

Three possible reasons for the crystallization of sex-typed toy choices between the ages of 14-20 months may be proposed. One is the greater parental concern with sex appropriate play as the child grows out of infancy and into childhood. Another is the increased importance of language during this period, magnifying the influence of parents. A third reason is the increase in availability of sex-typed toys appropriate to this age group. It has been found that up to age 2, both boys and girls receive many of the same toys, while toys for children over age 2 are more sex differentiated (Goodman and Lever, 1972).

Hartley (1966) describes how the process of sex-typing of toys and activities is self-perpetuating once it is set in motion. Once little girls begin receiving "girl toys" these acquire more and more reinforcement value through the process of emotional toning; sheer familiarization provokes positive response and requests for similar

activities. This process, coupled with additional sex-typing pressure, leads little girls to select and request girl toys despite the intrinsically greater interest in male toyd (Goodman and Lever, 1972).

There has been much comment on the implications of early sex-typing of toys and activities. (Goodman and Lever, 197[illegible]; Weitzman, 1975; Block, forthcoming, 1977). It has been found that "masculine" toys are more varied and expensive, with adults spending more time choosing boys' toys (Goodman and Lever, 1972). This is dramatically illustrated by the finding that of 860 toy boxes in a large toy store, 50% of the toys costing under $2 were aimed at girls, with only 31% aimed exclusively at boys. In the $5.00 and over category, 18% were girls oriented and 34% boy oriented. Does this data reflect the greater stress on appropriate sex-typing of boys? Does it reflect the fact that girls learn their sex-role by sharing in actual home-making activities with mother, while boys have no such preparation?

Furthermore, "masculine" toys are more complex, active, and social, with feminine toys more simple, passive and solitary. (Goodman and Lever, 1972; Weitzman, 1975). Are parents in their toy choices thus reinforcing high activity levels and curiosity in their boys and discouraging these traits in their daughters? A re-analysis of the Maccoby and Jacklin (1974) data by Block (1976) with the inclusion of eight studies omitted by the former authors suggests that boys are significantly more curious, adventurous, manipulative and/or exploratory than are girls. It does indeed appear that toy choices are geared to maximizing these trait differences between boys and girls. However, it should be pointed out that girls have some freedom to use boys' toys (Hartley, 1966).

An interesting explanation of female conformity and responsivity to adult approval has been proposed by Matza (in Weitzman, 1975). He suggests that "girls are taught to be more conforming and concerned with socially acceptable behavior because they are trained to act as socializing agents with their dolls. By talking to, and "training" their dolls to do the right thing, the girls themselves gain a vast amount of experience in articulating and sanctioning the cultural norms." (p. 118) Perhaps it would be beneficial to encourage such practice in the activities of boys.

Differentiated Shaping: A Summary

Our review of some of the literature regarding sex differences and differentiated shaping of behavior according to the sex of the child revealed the following:

. Evidence is strong that at least by the age of 2 1/2 boys are more aggressive than girls.

- Boys are more and earlier sex-typed than girls. By age 2-3 both sexes show sex-typed toy and activity preferences.

- There is tentative evidence suggesting the girls are probably more dependent on the appraisals of adults than are boys. Because of the tendency to lump various aspects of dependency together and to omit from consideration other possibly crucial aspects of dependence and independence, we cannot at this time make any clear statement about whether or not girls are more dependent than boys. It is our contention that future critical reviews of the research and future investigators must ask, in what ways, under what conditions, and at what ages the two sexes differ in dependence and independence.

- As Block (forthcoming, 1977) has indicated, we are sorely in need of a "coherent formulation of the socialization process" which will "permit specific and differentiated predictions about socialization practices as a function of the child's developmental level, the environmental context of the family, or parental role concepts." (p. 6) We might add that a theoretical formulation is necessary which will enable us to predict what types of parental response might encourage or discourage a particular trait in a child at certain ages.

- In regard to sex-typed activities and toys, parents begin to exert sex-typing pressure prior to the age of toddlerhood. Disproportionate pressure is placed on boys to engage in sex-appropriate play.

- Boys receive more punishment than do girls. They are physically punished more than their sisters; results regarding relative amounts of other types of punishment do not appear at present to be clearly influenced by the child's sex.

- There are no clear-cut results regarding differential socialization of independence-granting. Delineation of three separate areas of this behavior begins to suggest sex-differentiated parental response; further research is needed.

- Socialization of dependence also showed no clear-cut differences. Lack of conceptual and operational clarity is thought to be the possible cause for the inconclusiveness of the data. Further research would be helpful.

- Fathers and mothers have been found often to respond differently to their children. Fathers have been shown to be primary promoter of sex-typed behaviors.

- Fathers and mothers have been shown to exert different pressures on and to have different expectations for their sons and daughters in general, specifically in regard to the relative importance of achievement motivation in various fields. The fathers' expectations have been shown to be particularly important in determining the extent to which their daughters will be sex-typed in their achievement motivation and occupation choice. Thus, when a daughter has a strong warm relationship with a father whose approval is dependent on performance, she will be more likely to strive towards success in less traditional areas of endeavor and to have a greater need for achievement. However, in the majority of cases, the fathers' sex-typing may result in their daughters' being more traditional in their adult lives.

II. Imitation of Same-Sex Models

Imitation of same sex models, especially parents, has long been thought to be a primary way in which children learn appropriate sex-roles. If imitation of parents is indeed a crucial factor, it will be more difficult to intervene in the sex-role acquisition of the child. It is presumably easier to effect change parents reinforce their children or to influence the media than to change the parental model.

Surprisingly, it has not been found that young adults are notably more similar to their same sex parent. Research has focused upon aspects of beliefs and personality that are not related to sex-typing. Perceived and tested similarity to parents has been measured. (Reverences cited by Maccoby and Jacklin, 1974 and Lynn, 1974). A positive relationship between a son's masculinity and that of his father has not been established (Sex role orientation, preference and adoption were measured). (Lynn, 1974) Neither has a positive relationship between college women's femininity and that of their mothers been demonstrated (references in Maccoby and Jacklin, 1974).

It is interesting to note, however, that perceived similarity to the father has been shown to relate to positive social and emotional adjustment and low levels of anxiety (references cited by Biller, 1974, p. 57). It has also been demonstrated that degree of stress within the home is related to the degree of correlation between masculinity and femininity of children to their parents (Bronson, 1959 in Lynn, 1974; Biller and Zung, 1972) found that perceived maternal intrusiveness, maternal control and anxiety level were related to the masculinization of sex-role preferences in elementary school girls. Stinett and Taylor (1976) reported that youths who perceived their irelationships with their parents as positive tended to have less favorable perceptions of alternative life styles than those who viewed their familial relationships as negative. It has been repeatedly shown that children will imitate the more dominant or more nurturant figure (other things being equal) when more than one model is available (references cited by Maccoby and Jacklin, 1974, p. 286). These studies suggested that the extent of "identification" with the same sex parent regarding sex role might be predicated upon the warmth of the relationship. In other words, when a father is warm and accepting, a more "masculine" father might tend to have a more "masculine" son. This does not explain <u>why</u> boys become "masculine" and girls "feminine" but suggests that research to date has been too simplistic. Further research investigating the nature and importance of same sex parent modeling in the development of child's sex-role must take into account variables such as parental nurturance and dominance. Modeling of parents is obviously not the only way sex-role is acquired and may not be of equal importance to all children. It may be postulated at this point to the extent that the same sex-parent is nurturing <u>and</u> dominant the child will tend to use him/her more frequently as a model for sex-role behavior. To the extent that he/she is either absent or not a positive figure the child will either have more difficulty in sex-role development or will depend more on sources other than modeling of same sex adult, such as reinforchment for sex-appropriate behavior and modeling of peers and other same sex adults. Biller (1974), for example, found that low socioeconomic level father-deprived boys depend to a large extent on their peer group for defining their masculinity. Although the effects of the father may indeed be due to factors other than his role as model, Biller (1969) found that when the father was present, maternal encouragement of masculine behavior had little effect. In father-absent boys, the degree of maternal encouragement of masculine behavior was found to relate to masculinity of sex role adoption and preference.

Tests of the importance of same sex-modeling which yielded negative results depended on paper and pencil personality inventories and projective techniques. In studies reported by Maccoby and Jacklin (1974, Table 8.2) of children between ages of 3 and 5 using parents or their representatives (mother and father dolls) as models, three out of the six studies showed that children imitated the parent of same sex significantly more frequently. The other three studies, a series of investigations by Hetherington of children of various ages in which imitation of aesthetic preferences was examined, found no such tendency. None of the above studies dealt with imitation of sex-typed behavior or considered possible mediating variables, and all were done with children under age 6 except for two of the Hetherington studies.

Thus, while there is some evidence of a tendency of children between the ages of 3-5 to more frequently imitate the same sex parent, a clearer picture of the degree of importance of modeling in sex-role development necessitates further research examining possible mediating variables such as nurturance and dominance of parent, focus on more sex-typed behaviors and inclusion of children of varying ages.

It has been proposed that boys must shift from one primary model (mother) to another, unlike girls who maintain their primary models (e.g. Lynn, 1972). This observation has far-reaching implications; but of particular interest to us, at present, is whether the mother as model is more important to girls than the father is to boys. It has indeed been shown in a number of studies that girls imitated their mothers more than boys did their fathers (references cited by Tomeh, 1975, p. 19). It is interesting that in a study by Hetherington and Frankie (1967 - reported by Maccoby and Jacklin, 1974, Table 8.2) same-sex-parent imitation of novel game behaviors was significant only for girls. Lynn (1974) points out that "male playmates, heroes of books, films and TV and even mother and teacher may play a relatively large part in defining masculinity for boys" (p. 166). We may again point out, in this context, the greater relative importance of the large peer group as a reference point for boys and the correspondingly greater impact of adults on girls (Maccoby and Jacklin, 1974; Dweck and Bush, 1976).

Kohlberg's Cognitive-Developmental theory has focused attention on the connection between the age of the child (stage of his cognitive development) and his use of models in his sex-role development. It has been suggested that some sex imitation of same sex models may develop as a function of children's human attribute. In a recent study, Slaby and Frey (1975) found that the developmental level of

gender constancy was predictive of the amount and proportion of time children attended to an adult male and an adult female film model. As children developed gender constancy (regardless of age) they showed a relative preference for watching the same sex model. These authors indicate that future study will attempt to extend the relationship of gender constancy to imitation of behaviors.

A paper recently presented by Bryan and Luria (1977) discussed results of two studies testing the selective learning hypothesis. Slides of a male and a female model performing matched acts were shown and visual attention was measured by the method of feedback EEG. Ss were ages 5-6 and 9-10 (one study also included college-age Ss). No difference was found when models performed sex-neutral, sex-appropriate, or sex-inappropriate tasks, in the alpha blocking to the male vs. female slides. Children were found to significantly recall and prefer their same sex tasks.

The discrepancy between the Slaby and Frey findings and the results of Bryan and Lewis may be explained as the result of the use of different measures of attention, use of different portrayals of models (movies vs. slides) and the attention in the former to the child's developmental level regarding gender constancy.

Further study along these productive lines will be needed to assess attention (measured in various ways), recall, and preference for same sex model (parent and non-parents) as a function of developmental level (and age of child), type of task (sex appropriate, inappropriate and neutral), and media of portrayal of model.

The studies cited by Maccoby and Jacklin (1974, Table 8.2), showing no tendency for children to preferentially imitate same sex adults, dealt almost exclusively with children under age 5, at which time gender constancy may still be variable. These authors point out that "the studies that do report a same-sex model choice tend to have subjects over the age of 5; however, other factors are present in these studies that make any conclusions about age trends risky." 9p. 295)

There is some tentative suggestion from the results of these studies that children at younger ages may be more likely to imitate a same sex model when that model is a parent. Again, further research is required to assess the validity of this contention and to consider, if this is true, at what age children transfer this tendency to imitate same sex models to non-parent adults. Another interesting consideration raised by these studies is that by the time a child may be cognitively ripe for attending to and imitating the same sex adult model, the peer group may serve as a more important source of direction for sex-role development.

In sum, it appears that the modeling of the same sex parent is a probable source of direction for sex-role development. The degree of importance of this source is most likely dependent on several mediating variables such as the nurturance, dominance, and availability of the model. It is also probable that the adult model plays a greater role in the sex role development of girls than boys, and that other factors play a relatively more significant role in the sex role development of boys. The tendency to model after non-parent-adults seems to relate to the child's stage of cognitive development.

These ideas tentatively (pending further research) suggest that having same sex adult teacher models is no easy solution to sex-role learning problems. It appears that to younger children (preschool) it is not likely to make much of a difference in terms of modeling same sex behavior. Perhaps with older children (elementary school) the sex of the model might make more of a difference, though the impact might be somewhat lessened by the increasing pull of the peer group at this age. It also appears that there are several variables mediating the model's effectiveness (e.g. nurturance, dominance) so that a same-sex model is important only insofar as he/she is a positive figure.

Siblings and Birth Order

In the last section we mentioned the possible importance of peers as models for sex-role development. We not turn to question the extent to which siblings are influential in this area. It has consistently been found that siblings do significantly influence sex role development. (Literature reviewed by Tomeh (1975); Bigner (1972); Leventhal (1970.) The influence of older brothers is especially great in cases in which the father is absent (Biller, 1974). The direction of influence, however, has varied. One study found that second-borns tend to adopt response patterns opposite that of the older sibling (e.g. Leventhal, 1970). This is viewed as a reactive mechanism to avoid unfavorable comparison with an older same sex sibling or as a negative model in rejecting the traits of an older opposite-sex sibling. Fauls and Smith (1956, reported by Tomeh, 1975) found "that only children chose sex appropriate activities more often than did children with older same sex siblings." (p.30)

Other studies have found that children acquired the response tendencies of their older sibling. Tomeh (1975) indicates that most of the available research is consistent with this latter position, i.e., positive modeling of behaviors of the older sibling. Bigner (1972) found that significant positive modeling occurred for females with older male sibs but not for males with older sisters.

This is explained as due to the greater prestige of male activities and traits (see Tomeh, 1975, p. 31). Bigner reported a trend toward evaluated IT Scale for Children scores in males in the direction of the older female sib, when the age spacing was under 20 months. Green (1974) reported that feminized boys were more likely to have younger sisters than older sisters.

The discrepancy between the Leventhal (1970) and other studies has been attributed to the use of different scales measuring different trait dimensions. It has been proposed that for certain traits children will tend to model their older sib and for other traits they will react against the patterns of behavior demonstrated by an older sib.

There are few studies in this area and the existing research raises more questions than it answers. It is evident however that older sibs do play a role in sex-role socialization of their younger sibs. This suggest, that influencing the sex-role stereotyping of the older sib might affect his/her younger sib. Future research should examine the effects of traits measured; it is fascinating to consider why certain traits might show an androgynous effect of the older sib on younger opposite sex sib, while other traits might show the reverse. Such findings might have relevance for intervention techniques aimed at undoing sex role stereotyping.

Tomeh (1975) points out that current emphasis on population control should tend to increase the proportion of first born children in the population representing the stereotypical sex-role attitudes. Research has shown that first-born children, especially girls, identify with the parents more than do younger children (i.e., they are more the carriers of the conventional sex-role pattern). For example, a study by Kammeyer (1966, cited in Tomeh, 1975) showed that college students who were first-born girls, as compared with later borns, "were more traditionally oriented toward the feminine role, had more traditional beliefs about female personality characteristics, were more likely to perceive themselves as religious and were more in accord with their parents. (p. 29)

In brief, then, current population control programs should increase the difficulty of education toward androgyny.

Parental Role Differentiation and Father Dominance

Educating toward androgyny implies the lessening of role differentiation between the sexes i.e., sex specific activities and tasks). After the first flush of pleasure in the idea of role freedom for all children dies down, we are left with some nagging doubts about the implications of androgyny. The main questions are:

Will boys still know that they are boys and will girls still identify themselves as girls? Will each still have heterosexual interests? Will excessive anxiety be generated by the lack of clear-cut roles?

Almost all of the sex role literature focuses on correlations between masculinity or feminity and various aspects of mental health. Only recently have attempts been made to assess the relationship between androgyny (the combining of the desirable masculine and feminine traits and behaviors) and psychical well-being, and the results have been encouraging (Bem, 1975, 1966).

Another less direct way of exploring the implications of androgyny is to look at the literature evaluating the effects on children of varying degrees of parental role differentiation. It should be mentioned that various factors are providing increasing pressure toward role de-differentiation (i.e., maternal employment) and focus on the importance of father nurturance as well as mother nurturance.

According to Parsonian theory (1955 - cited by Slater, 1964) role differentiation along an "instrumental - expressive" axis is a crucial characteristic of the nuclear family (with the father playing the instrumental role and mother the expressive-nurturant role). Such an arrangement has been viewed as facilitating the child's identification with same sex parent and normal personality development in the child. Slater (1964) takes issue with this viewpoint and points out that in a highly mobile society in which role flexibility is valued, less differentiated parental roles are more beneficial. This gives the child an early opportunity to form a generalized self-concept from non-conflicting perceptions derived from both parents, with later opportunities to increasingly select behaviors and attitudes from same sex parent.

Slater cites the results of empirical studies which "consistently show" a negative relationship between the degree of parental role differentiation and the emotional adjustment of the child. The following descriptions will give the flavor of the research upon which Slater based this generalization. Lazowik (1955) found greater "semantic similarity" between parents of less anxious subjects than between parents of more anxious subjects. Manis (1958) found that his well-adjusted Ss saw parents as more alike than did maladjusted Ss. Slater found significant positive correlations between degree of perceived parental role differentiation and most of the pathological scales on the MMPI. Wechsler (1957) found that Ss who perceived a high degree of parental role differentiation also experienced conflict in their self-perceptions.

These studies deal with parental role differentiation and mental health indices; but what can we say about parental role differentiation and success in sex role socialization? Block, et. al (1973), in a longitudinal study (using data collected over a 30-40 year period) assessing the relationship between parental qualities and degree of socialization and sex-typing of their children, found that when the roles of nurturant-stable parents were highly differentiated, children tended to be high in sex role socialization and high in sex-typing; when parents' roles were less differentiated, children tended to be high in socialization but low in sex-typing. For highly socialized males, both high and low sex-typed group were productive, effective, dependable and conscientious and seemed comfortable with themselves. For highly socialized females, however, a lower femininity score was suggestive of better adjustment. This study indicates that parental role differentiation influences the degree of sex-typing of the child; with more highly differentiated parents having a more highly sex-typed child and vice versa. However, where parents are nurturant and stable, offspring of either type of parent relationship will be highly socialized, with males in both groups "well-adjusted." For females, lower parental role differentiation is the more successful arrangement.

These results suggest that relaxing the traditional differentiation of parental sex role of parental role differentiation, (when in the context of nurturant and stable parenting) is not harmful to mental health and sex role development, though it does lower sex-typing. To what extent and within what limits role differentiation between parents is healthy in terms of the general emotional well-being and sex role development of the child is a crucial area for further research.

A closely related critical issue is the question of parental dominance within the home. With a push toward greater equality between the sexes one would expect that there would be a trend toward less father domination and greater father participation in childrearing and household chores (lynn, 1974). How should this trend influence sex role development? Lynn broadly defines family power distribution as follows: "More power rests with the one who confers the right to make daily decisions, but retains the right to make the daily decisions." (p. 118)

Since the father has been shown to be the major reinforcer of traditional sex-typing, children in father dominant families would probably show more typical sex-role development than those in homes which the father was not dominant. Lynn (1974) and Billet (1974) found that the preponderance of evidence roughly supports this contention. Lynn summarizes the research as follows: "Mother dominance seems to have a marked effect on boys, lowering their tendency to imitate their father, and thus their masculine orientation. Father dominance on the

other hand does not lower the femininity of girls." In some instances a moderate level of father dominance was associated with greater amounts of femininity in boys.

What is the relationship between paternal dominance and mental health? Biller (1974) concludes a review of the literature as follows: In general, a moderate degree of father dominance has been found to be associated with emotional well-being in children; "maternal dominance has been found to be associated with a varied array of psychopathological problems, especially among males." (p. 82) A trend toward de-differentiation in parental sex role may alter the meaning and consequences of relative parental dominance. Father dominance may cease to be a relatively positive factor and mother dominance a negative factor.

It appears then, that extreme dominance by either parent is no good, but that mother dominance may be especially unhealthy. Further research may reflect results of societal changes. It is unclear how relatively equal distribution of parental power influences the children. Again, as in the case of role differentiation, how much dominance is not too much remains a question.

One of the keys to parental role de-differentiation lies in maternal employment. Let us now examine the effects of maternal employment on sex role development in children.

Maternal Employment

Recent studies (1972, 1973 reported by Tomeh, 1975, p. 41) have shown increasing numbers of college women aspiring to combine marriage and children with a career. The anticipated effects of increasing maternal employment on sex role development of children may be viewed as wide-ranging both because maternal employment necessitates a decrease in differentiation of sex roles within the home, and implies the potential for liberating male-female differences from "inhibitive status distinctions." As Tomeh (1975) indicates, "Some of the changes that might be included in this trend are the increased participation of the father in routine household tasks, a change in power relations from male dominance toward husband-wife equality, changes in the ideology about sex roles in the family, and so forth." (p. 25)

Hoffman (1974) reviewed studies of the effects of maternal employment on sex role socialization and found the following: daughters of working mothers tended to view a career as something that they will want when they are mothers; they more often tended to see mother as a positive model; they tend to see females as more competent and effective than daughters of non-working mothers (a finding further substantiated

by Broverman, et. al 1972). The most equalitarian ideology was held by daughters of women in high status occupations; having a working mother was associated with less traditional sex role concepts in their daughters. There was some support for the contention that daughters of working mothers were more independent because of modeling their independent mothers.

In a recent study, Miller (1975) found further support for the notion that daughters of working mothers are less stereotyped in their sex role. She studied kindergartners and found additionally that daughers of working mothers significantly more often than daughters of house-bound women gave their mothers as the person they would like to be. It is interesting that teachers rated these girls as more aggressive, less passive, more likely to brag, and more often seeking attention in negative ways. It appears that less traditional sex role attitudes were combined in these girls with less traditional female character traits, making them, like their figurative brothers, more difficult citizens of the classroom. This study suggests that it might be necessary to expect freeing of sex role stereotyping in girls to be accompanied by more difficult to handle classroom behavior.

We now turn to the effects of maternal employment on boys. (Hoffman, 1974) College males were less influenced by maternal employment than college females - a finding consistent with the concept of same sex modeling of sex role behavior. College sons of working mothers tended to see significantly smaller differences between men and women on the warmth-expressiveness clusters: they saw mother and father as more similar to each other in nurturance than sons of nonworking mothers who saw dad as less nurturant than mom. Their perceptions of relative male-female competency were unaffected. However, lower class male adolescents seemed less satisfied with their fathers when mother worked; they were less likely to name dad as the person they most admire.

The important interaction of socioeconomic status with effects of maternal employment are further illustrated in a study by Nash (1974). She found that the effect of an intervention technique aimed at decreasing sex role stereotyping in 5th grade children was significantly greater when mother was employed if the child was from a high socioeconomic level and was significantly less when mother was employed if the child was from a low socioeconomic level. These studies suggest that the reasons for the mother working play an important role in mediating the effect of mother's employment on sex role attitudes of children.

Several studies have attempted to look at the relationship between girls' self-esteem and mothers' employment. (Baruch, 1973 and Miller, 1975) No significant relationships have been found.

It would seem that only if reasons for mothers' employment and degree of maternal work satisfaction are taken into consideration might a relationship between mother employment and daughter's self-esteem be discerned. Further research on maternal employment and its effect on sex role development must take into account socioeconomic level, reasons for mother's employment and degree of satisfaction derived from working. Most of the current research has been done with adolescents and college age Ss. Future research should be aimed at younger children.

Father Absence and Sex Role Socialization

It has frequently been suggested that the importance of the father as a model can be deduced from the effects of his absence. Paternal deprivation is, however, a complex issue. It is difficult to separate the effects of the father as a model from his function as a key reinforcer of sex-typed behavior. Nor can we overlook the enormous economic, social and emotional strain on the maternal role caused by father absence.

There is currently some dispute about the size of the effects of father absence, with Biller (1974) and Lynn (1974) maintaining that the effects are far and profound in such areas as juvenile delinquency, school achievement and masculine identity. Herzog and Sudin (1973), on the other hand, caution that the evidence "is neither clear enough nor firm enough to demonstrate beyond doubt whether fatherless boys are or are not overrepresented among those characterized by the problems commonly attributed to them." (p. 214) We will shortly consider in greater detail the question of whether father absence correlates with impaired sex role learning and deficits in cognitive academic achievement.

There is also some disagreement regarding the relative importance of the various reasons for the effects of father absence. Biller (1974) and Lynn (1974) stress the absence of father as a model while acknowledging the importance of other variables. Herzog and Sudia (1973) point to differences in SES between father-absent and father-present homes as the key factor. They cogently argue that female-headed households, especially black ones, tend to cluster at the lower layers of each level so that a three-way break (lower, middle, upper) does not obviate substantial differences within each level. Furthermore, "the lower one goes on the income ladder the more important rather small dollar differences become." (p. 158-159) This argument implies that addressing the economic problems of the father-absent family should help to reduce the negative effects.

One of the reasons for the discrepancy between Biller (1974) and Lynn (1974) on the one hand and Herzog and Sudia (1974) on the other regarding the magnitude of effects of father absence on sex role

learning is that the former have included some studies using improved research technique. These studies have distinguished three separate aspects of sex role learning: orientation, the child's evaluation of himself or herself as masculine or feminine; preference, the desire to adhere to the cultural prescriptions and proscriptions of the masculine role; and adoption, how masculine an individual's behavior is judged to be by others in the society (Lynn, 1974, p. 122).

Father absence apparently affects sex role orientation more than preference or adoption. Particularly among lower class boys, father absence is highly correlated with low masculine orientation, and possibly with an overly rigid and compensatory masculine sex role preference and adoption. It is interesting to note that Aldous (1972) found that low socioeconomic level pre-school children showed age appropriate knowledge of conventional adult sex roles despite father-absence in their families. This seems to indicate that the effects of father absence on sex role acquisition are apparently not due to lack of knowledge.

Biller characterizes the general effects of paternal deprivation on lower class socioeconomic boys as follows: The paternally deprived boy is likely to have developmental difficulties... especially... if he comes from a generally disadvantaged background. Father absence and/or father inadequency can be highly debilitatory for the lower-class boy, particularly if it begins in early childhood. The paternally deprived boy is likely to be insecure in his peer relationships as well as in his relationships with authority figures. Not having a consistently interested adult male with whom to interact, he may experience problems in learning to control his impulses. He may become tied to his mother, or may become equally as dependent on his peer group. He may be less able to act independently and competently. Lack of masculine behavior and/or a compensatory overstriving are more frequent among inadequately fathered boys than they are among adequately fathered boys." (p. 84)

According to Biller (1974), the likelihood of maternal domination and overprotection is increased where there is no father, leading to emotional dependency, in both boys and girls, especially in middle class families. The lower class father-absent boy is less likely to be overprotected and more likely to be extremely rejected or neglected. Biller (1969) found that when fathers were absent; the extent to which mothers tried to foster masculine behavior was related to the son's masculine sex role preference and adoption, but not to sex role orientation; so that the mother can probably help to encourage only certain aspects of her son's masculinity when there is no father. The boy with the inadequate father is worse off than the boy with the absent dad because when there is a father present, however inadequate, mother has less ability to influence her son's masculine development (Biller, 1974).

These findings pose a problem for the educator trying to insure opportunities for an androgynous development, since the goals of androgyny foster appropriate sex role orientation and the loosening of sex role stereotypical preferences and adoption. How will the father absent boy, low in sex role orientation, fare under a system in which androgynous sex role preferences are encouraged? Will this emphasis on androgyny put additional strain on his relatively fragile masculine identity or will it reduce strain?

Fathers, according to Biller (1974) and Lynn (1974), also play an important role in their daughters' sex role development. According to studies by Hetherington (cited by Lynn, 1974), the effects of father absence are primarily expressed in adolescence and pre-adolescence when these girls show great difficulty in relating to males. However, unlike findings for boys, father separation showed no relationship to girl's sex role orientation. (Hetherington, 1972 in Lynn, 1974) Most other studies found no effect of father absence on sex role development of girls (studies included children between ages 5-15). This finding suggests that modeling does indeed play an important role in the sex role development of children.

If the effects of father absence are due overwhelmingly to economic strain produced by the absence of father, would we still expect these differences between the effects on sex role development of boys and girls in father absent homes? Does this not suggest some importance of father as a model?

In contrast to the lack of significant effect on girls' femininity as measured by paper and pencil tests it has frequently been found that father-absent girls are more likely to be over-dependent on their mother and to have difficulty in controlling their aggressive impulses (Biller, 1974 and Lynn, 1974). However, a recent study by LeCoigne and Laosa (1976) of fourth grade father-absent Mexican-American boys and girls found that teachers rated father-absent boys, but not father-absent girls, as showing more signs of social and emotional maladjustment than father-present children. Perhaps in the context of the school and in the presence of the peer group the effects of father absence are found only in boys? Perhaps this is a finding specific to the Mexican-American sub-cultural context?

Two variables which have been shown to strongly influence the effects of father absence are the reasons for the loss of the father and the age of the child when the loss occurred. According to Lynn (1974) and Herzog and Sudia's (1973) summary of research, father absence because of separation, divorce or desertion probably has more detrimental effects on adjustment than father absence due to death.

According to Biller (1974) researchers have just begun to attend to reason for father's absence as a factor in the effects of father absence on children. He suggests that future research take this factor into account.

It has most often been shown that the earlier the loss of the father the more critical the effects on the son. Before the age of five is frequently set as a conceptual demarcation point. According to Biller, research has shown that "if the boy becomes father-absent after the age of 5, his sex role development appears to be much less affected than if he becomes father-absent early in life, particularly if the absence begun during the first two years." (p. 53) The results regarding age are ambivalent. Two studies reported a stronger effect when the child was over six: one with regard to feminine aggressive behavior and the other with regard to general mental health (McCord, et. al, 1962, and Langnev and Michael, 1963, both reported by Herzog and Sudia, 1973).

The importance of what Biller calls "surrogate models" has been implied by the research results. Two types of surrogates have been mainly considered, stepfathers (or father substitutes) and older male sibs. There are only a few studies specifically measuring on the effects of stepfathers and father substitutes on sex role development of boys. The few that Biller (1974) cites indicate that where boys had a father substitute they were more masculine in their interests and less dependent. A recent study by Ashman and Manosevtz (1976) of male college students indicated that with boys who became father-absent during grade school the presence of a stepfather led to significantly better emotional and psychosocial adjustment so that there was no difference between the father-present and stepfather group. Beller cites need of future studies of the effects of the stepfather to consider following variables: age of child when stepfather joined the family and quality of fathering given and the nature of the mother-child relationship. We might add socioeconomic level as another critical variable.

In accord with major thrust of the findings reported in the previous section dealing with the effects of siblings on sex role development (that the presence of older male sibs tend to correspond to more masculine qualities in the younger sib), Beller (1974) reports that father-absent boys with older male sibs tend to suffer less deficit in academic aptitude and are more masculine than boys with older sisters. Santrock, 1970 and Wohlford et. al, 1971, both reported by Biller, 1974, similarly found that father-absent boys with older brothers were less dependent than father-absent boys with older sisters. These results suggest the importance of the older male sib as a model when the father is absent.

One of the major findings regarding the effects of father-absence is that father absence has a markedly negative effect on the lower class boy's cognitive and academic functioning (Beller, 1974). This is a very serious fact when one considers that as many as 50% of the children in low socioeconomic black families are growing up without fathers (Beller, 1974). These boys are especially likely to have difficulty in "making it" in the "feminized" elementary school classrooms. Their reading skills seem to be particularly affected since reading is thought of as a feminine activity. Because academic achievement in elementary school is so dependent on verbal and reading ability, father-absent lower class boys seem to have a particularly difficult time.

Herzog and Sudia (1973) point out, perhaps correctly, that the effects of father absence are dwarfed when compared with the influence of SES level and sociocultural variables. They further state "it seems unlikely that father's absence in itself would show significant relationship to poorer school achievement if relevant variables (including type of fatherlessness and SES) were adequately controlled" (p. 157). However, if this were the case, would not girls be affected equally as strongly as boys? This does not appear to be so. Further research comparing academic achievement of lower class father-absent or present boys and girls, with serious attention to SES controls, is needed.

Father-absent middle class boys do not appear to be so academically handicapped. Middle class mothers, being more often intellectually and academically oriented than lower-class mothers, seem frequently to be able to promote reasonable academic adjustment in their sons. (Biller, 1974) According to Lynn (1974) loss of father does seem to be accompanied by poorly developed mathematical skills in sons (and sometimes in daughters). He further states that father loss is associated with difficulty in analytic tasks requiring sorting out misleading cues, with poor performance or nonverbal tasks and verbal comprehension, and with low motivation to achieve in mechanical skills (p. 280). These findings lump together all SES classes. Whether these effects are the result of increased anxiety, loss of father encouragement of these abilities, loss of opportunity to learn these abilities, etc., is still unclear.

Biller (1974), as well as Herzog and Sudia (1973), strongly urges incorporation of more male teachers, particularly in nursery, kindergarten and in the early elementary grades to mitigate the effects of paternal deprivation. They also suggest the increasing participation of fathers in the educational process and the involvement of older boys with younger children. Herzog and Sudia (1973) point to the importance of avoiding singling out the father-absent child for special treatment, since father absence in itself, particularly where the cause is separation or divorce, make the child feel different (though this difference is becoming less and less with the marked increase in divorce rates).

The question remains as to what extent additional, positive male models in the schools will help to promote better academic and cognitive skills and a more solid masculine identity in father-absent boys. Biller (1974) claims that he has "often found an improvement in school work associated with explicit reinforcement from adult males," (p. 159) enabling the boys to see that there is no conflict between masculinity and academic achievement. According to Lynn's (1974) review of the literature, father loss in young boys is associated with a desire and struggle to identify with men. He cites two interesting studies illustrating this quality. In the first, Corks and Fleming (1968) found that lower-class father-absent black boys in the 4th grade showed a "marked need for masculine identification which they expressed by a preference for male teachers and a warm response to the male investigator conducting the research" (p. 270). In the second study reported, Hodges, et. al (1964-1966) found that "5-year-old boys who lacked a father (or father substitute) in the home almost desperately sought attention from any male they could find who gave them so much as a glance.

The above findings have an anecdotal flavor. What does other research show? Badaines (1976) found that 7-year-old Black Chicano father-absent boys and father-present boys both tended to imitate the male model significantly more than the female model though father-absent boys imitated the female model significantly more than did father-present boys, suggesting that while the father-absent boy may be in more need of a male model, he will possibly pay less attention to a male model than his father-present counterpart.

Vroegh (1972) attempted to assess the relationship of father presence, absence to the relative effects on academic achievement of male and female teachers. Subjects were fourth and fifth graders, and academic achievement was measured by a pre- and post-standardized achievement tests in reading, mathematics and language. Vroegh concluded that male teachers did not have a positive effect on academic achievement as a function of the extent of father presence-absence. Vroegh points to three limitations on the generalizability of these results. First, in this study, father presence-absence was defined on a continuum of quantity rather than the more usual measure--perhaps a continuous measure is too subtle. Second, Ss included in this study were from higher SES status, so that the absolute level of father absence might have been relatively low. We might add that it is only in the lower SES group that father absence has been shown to cause significant general depression of academic achievement (Biller, 1974). Third, Vroegh proposes that a one-year intervention period may not be sufficient to produce changes.

We maintain that the importance of male teachers as models may be a separate and perhaps more important issue for father-absent as compared to father-present boys. As divorce becomes more prevalent and social change causes great amounts of stress within families, we can perhaps expect father absence to increase. On the other hand, in families which have weathered the social storms we can expect father involvement with children and home to increase (Lynn, 1974). This may lead to a further polarization between father-absent and father-present children. Future research should assess the effectiveness of the male teacher as compared to the female in helping to combat the effects of father-absence not only in the area of academic achievment but also in sex role orientation and other aspect of sex role acquisition. Such studies will need to vary age level of subjects age of child when father loss was experienced, amount of paternal deprivation within a particular time period, length of father absence, length of involvement with a male teacher, cause of father absence, the extent of presence of other male models in the child's life, SES (possibly measured as a continuum rather than the traditional three broad categories) and sociocultural background.

Summary of Imitation of Same-Sex Models

Modeling of the same sex parent is probably more or less important in the sex role development of the child depending on the attractiveness, salience, and power of the parent model. To the extent the parent model is unattractive or inadequate, the child probably acquires his sex role to a greater extent by other methods such as direct reinforcement by adults, from peers (as models and reinforcers), other adult models, and the media. So the question at present is not whether children use parent modeling or not in the development of sex role, nor to what extent modeling is important, but rather under what conditions are the various influences augmented or lessened in their effects. To be more specific, at what ages of the children and under what conditions will parents serve as effective sex role models? Under what conditions will peers or media be the primary sources of sex role learning and acquisition, e.g., in father-absent black lower socioeconomic level boys? At what ages do children start imitating non-parent same sex adults, for what types of activities or values? What types of models are most imitated? Additionally, we have begun to examine the relationship between cognitive development and modeling. And just recently research has begun to distinguish three different aspects of sex role development, i.e., orientation, preference and adoption. These various aspects have been shown to be very imperfectly correlated, indicating the importance, of considering each of these aspects separately (see Biller, 1974) in research dealing with the nature of the influences on sex role development of the child.

Older siblings have been shown to influence sex role development of younger siblings. Most studies have shown that the younger sibling tends to be influenced in the direction of the sex of the older sibling. There are some discrepant findings thought to relate to the specific traits measured and there is some evidence that older brothers are more influential than older sisters. Here again further research is needed. Results tentatively suggest that intervention techniques aimed at older siblings perhaps might influence a younger sib as well.

The first born child is the one likely to be most sex-typed and to be the conserver of tradition. To the extent that population control aims at increasing the numbers of one-child families, we may have a trend working against sex role equality.

On the other hand, the current trend toward role dedifferentiation in the family would be exptected to lead to lessening the rigidity of sex-typing and perhaps lowering status differential between boys and girls. For instance, maternal employment seems to have a greater influence on girls than on boys. Girls whose mothers are employed are apparently less sex-typed, are more anxious to model their mothers and see women as more competent than do girls whose mothers are not employed. The effect on boys apparently is mainly in terms of their view of father, and the nature of the effect (positive or negative) depends very much on social class of the family. Variables which have been seriously rejected in studies of the effects of maternal employment are the status of the mother's job, her job satisfaction and, to lesser extent, the father's attitude toward the mother's employment. It has been postulated that maternal employment, in lowering sex-typing, may also result in less compliant, less docile girls; however, the nature of the underlying mechanism can only be hypothesized. It is indeed possible that lowering the sex-typing in girls and lowering the status differential between boys and girls might lead to a more difficult-to-handle girl pupil. Further research in this area would be needed to substantiate this finding.

One of the concerns regarding education toward androgyny is the extent to which boys and girls can be educated in this way and still maintain their female or male identities and heterosexual orientations. Research on role dedifferentiation of parents suggests by implication that loosening of sex-typing in our society is beneficial both in terms of general emotional well being and in terms of freeing up sex-typing of children. How much parental role dedifferentiation is a positive influence for the child, and what influence education of children toward androgyny has on sex-typing heterosexuality and mental health are areas for further research. (This is an issue which we shall again consider in our discussion of research implications.)

Father-absence is a problem apparently negatively influencing sex role development, mental health, and cognitive and academic functioning of children, particularly in low socioeconomic families. To what extent the effects of father absence are due to the lowering of economic status of female-headed as compared to a male-headed household remains a difficult area for further research. The influence of surrogate male models (e.g., teachers) must be assessed independently of the need for more male teachers in the schools. In addition, the effects of educating toward androgyny on father-absent children must receive special attention.

III. Recommendations

Implications for School Programming

Several reasons have been proposed to explain the inconsistencies in results of studies in assessing parental socialization practices regarding sex-typing. The most salient of these reasons are: the use of excessively broad definitions of the behavior under examination, the combining of various behavioral measures, and the lack of inclusion, or inconsistent inclusions, of fathers. We should like to propose an additional explanation. Parents base their actions on various guiding principles. Sex-typing is only one of these, albeit an important one. Another is what the parent believes is desirable child behavior, i.e., a child who is pleasant to live with and be with. Let us call this desirable behavior the "Good Child Role." That parents do differentiate between what they see as sex-typed behavior and how they define the "Good Child Role" is suggested in two studies. Lambert, et. al (1971) studying parents of 6-year-olds, found that parents reported that boys were more likely to be rough at play, be noisy, defend themselves, defy punishment, be physically active, be competitive, do dangerous things and enjoy mechanical things. Girls were thought to be more likely to be helpful around the house, be neat, and clean, be quite and reserved, be sensitive to the feelings of others, be well-mannered, be a tattle-tale, cry or get upset and be easily frightened. When parents were asked to state which of these qualities they thought was important for each of the sexes, they responded that it was important for both boys and girls to be neat and clean, to be helpful around the house, to be able to take care of him/herself, not to be easily angered, not to do dangerous things, not to cry, to be considerate and thoughtful, to defend themselves from attack and to be competitive. Smith (1971) in Maccoby and Jacklin (1974) working with American black parents found similar results.* It is readily evident that the sex-role stereotypes

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*A recent paper presented by Robinson (1977) indicated that both male and female caregivers reinforced children significantly more for feminine behaviors than masculine behaviors and presented masculine behaviors more than feminine behaviors.

and the "Good Child Role" often do not coincide (e.g., neatness and cleanliness are valued in both boys and girls yet all traits emphasized only in girls' sex role stereotype.

When the "Good Child Role" and sex role stereotype do not coincide, parents may be reinforcing behaviors on ambivalent bases. Future studies should include assessments of parents' attitudes toward the child behavior under study--both in regard to sex-appropriateness and in regard to desirability--that will help to better understand the complex process of socialization of sex roles, and will afford a fuller view of the nature of the "home" pressures which the child brings with him to school.

The studies by Lambert, et. al (1971) and Smith (1971, in Maccoby and Jacklin, 1974) also suggest that it might be easier to affect the sex-role stereotyping which parents do than might otherwise be thought: if parents are in conflict about how they wish to shape certain behaviors it should be easier to shape parents' behavior. We shall pick up this tread, again a bit later.

If we reexamine the results of these studies it appears at first glance that the "Good Child Role" seems to be more consonant with the female sex stereotype than with the male. Attributes of girls thought be be undesirable demand either a caring response (e.g., crying, fright) or helping response (e.g., tattling). Boys' "undersirable" attributes challenge the role of parent, and demand limit-setting (defying punishment, noisy, roughness, high activity level, doing dangerous things).

Early socialization then would be thought to be less stressful for girls than for boys. However, at a fairly early age children become aware that the girls' role is held in lower esteem than the boys' role (Weitzman, 1975), is awarded less value and prestige (Kohlberg, 1966) and is less desirable (Henslee and Jones, 1976). So, although early socialization is easier for girls, the role that is presented to them is somewhat less appealing. Though socialization is harder on boys it presents them with a role that is more valued. This higher status enables many boys to maintain reasonably good sense of self while maintaining the roles of "outlaw" (non-acceptance, of or reluctant acceptance of ministrations of the system as represented by mother (the principal caretaker) at home and teacher (most likely female) at school. The situational demands at school would seem to be similar to the "Good Child Role" in the home (a child who is noisy, defies punishment, highly active, rough, into dangerous activities would be much more difficult to have in a classroom than a child who is fearful, a tattler, and a cryer). In the case of undesirable traits of boys, the contagion aspect presents an additional difficulty in the schools; girls' behavior is less likely to be of the contagious sort and furthermore girls are less responsive than boys to peer group influence. (Maccoby and Jacklin, 1974; Bronfenbrenner, 1970, and Hollander and Marcia, 1970, both in Dweck and Bush, 1976)

We should like further to suggest that the rewards for the "Good Child Role" play a more important role in early socialization than the status factor, and there is evidence that girls' tendency to favor boys' activities over their own, without the reverse being true, increases with age (Hartup and Zook, 1960 in Weitzman, 1975). With increasing age, boys and girls increasingly ascribed desirable traits to boys and give more prestige to them (Smith, 1939, in Weitzman, 1975). Differential sex role status becomes a more salient influence as the child grows older--long after commitment has been made to appropriate sex-typing and long after the process of self-socialization is in full swing (Maccoby and Jacklin, 1974). We would additionally like to suggest that as the child grows older parents perhaps have a different "good child model," because they are now looking forward, gradually becoming more concerned with socializing the child to a "Successful Adult Role." The "Good Child" role and the "Successful Adult" role are not consonant; there is a distinct discontinuity. As an adult, assertiveness, independence, competetiveness, and willingness to take risks become more important to "success" than the compliance, helpfulness, tidyness and quiet, so that now more of the boy's traits become more desirable than those of girls.

Furthermore, the early relative consonance for girls has narrowed their opportunities for androgyny. Boys forced to wrestle with the "Good Child demands" as opposed to "boy sex-role demands" have more of an opportunity in the long run (as compared to the short run) for synthesis of varieties of traits than do girls.

In a study of adult men and women, Broverman, et. al (1972) found a strong consensus about the differing characteristics of men and women existing across groups differing in age, religion, education, and marital status, with characteristics ascribed to men valued positively more often than characteristics ascribed to women. These male characteristics form a cluster of related behaviors entailing competence, rationality and assertion. Women's positive characteristics clustered around warmth and expressiveness but these were not nearly as positively regarded as those of men.

Block, et. al (1973), using data collected over a 30-40 year period, found that in the male sample, both masculine and less masculine men in the highly socialized group (as measured by the Socialization Scales of the CPI) incorporated positive aspects of both masculine and feminine sex roles, i.e., they were productive, effective, dependable and conscientious. In contrast, masculine and less masculine men who scored lower on the Socialization Scales showed a differential internalization of the negative aspects of the corresponding sex role. These results contrast with those of women in the highly socializized group in which feminity score determined the success of adjustment--with a lower femininity score suggestive of a better adjustment. Highly feminine, highly socialized women typified the traditional concept of femininity.

i.e., dependable, conservative, self-controlled, not rebellious in spontaneity; the low feminine, highly-socialized group were described as poised, calm, nonrebellious, contented, gregarious and conventional. Block (1973) concludes, "For women, the socialization process tends to reinforce the nurturant docile, submissive, and conservative aspects of the traditionally defined female role and discourages personal qualities conventionally defined as masculine: self-assertiveness, achievement orientation and independence." For men, the sex role definitions and behavioral options are broadened by socialization (p. 525).

Block (in press) makes a strong case for age related differences in the nature of socialization pressures. She points out that "parental socialization emphases are dynamic and responsive to the changing environmental demands, to the emerging competence and responsibility of the child, and to reorganizing conceptions of the parental role over time." (p. 7) Block also suggests that there is evidence that sex-related differences in socialization are increasingly expressed by parents as the child gets older. Just how dynamic parental socialization emphases are is an area for further research.

Let us briefly summarize the process of socialization as suggested by these findings. Girls and boys are aware of sex role stereotypes by age 5, if not before (Masters and Williams, 1976; Aldous, 1972) and are already long stereotyped in their toy choices and activities by this age (see previous section). Their behavior also shows some differences with boys being more aggressive, more active, more sensitive to peer approval and more sex-typed than girls, and girls being more timid and more sensitive to adult approval. There would seem to be other differences, though further research and a more careful and extensive evaluation of existing research is necessary to document these. The school and the home both exert a similar press on girls to maintain the "Good Child Role," which is close to the female stereotype. As girls get older there is additional pressure in the direction of sex role stereotype, yet such behavior becomes less generally positively valued and satisfying.

By the time they enter school many girls are committed to (locked into) the female role, with the gender labeling, the organizing rubric around which children actively, selectively and with increasing complexity construct their sex-role definitions (see Kohlberg's cognitive developmental theory), despite the fact that less and less value may be placed on attributes.

For boys, the environmental press is more ambivalent, and promotes what might be called the "outlaw" system, with boys achieving self-esteem by bucking parents and teachers and getting peer approval. As they get older more of the boys' traits become desirable and those who have made it through the tensions of ambivalence, have been reasonably successful in school, have not gotten into trouble with the law, or

required extensive psychological help, are more able to become androgynous (than their female counterparts.) There are a significantly greater number of boys than girls, who do not succeed, i.e., who do get in trouble with the law, fail in school, or require extensive psychological help (Sexton, 1969; Lee, 1976).

It is evident that the socialization practices with regard to sex-role stereotyping benefit neither boys nor girls. What are our degrees of freedom for fostering a more androgynous socialization in the home? We have enumerated three (interrelated) primary ways in which sex-role stereotyping is fostered in the family: one is the differentiation of toys, activities, and playmates by sex; another is differentiated reinforcement of attributes and a third is the structure of the family (with mother as the principal caretaker and father as the primary monitor and promotor of sex role stereotypes as his "instrumental" function).

Attempts to promote change in the schools have had some success with girls but virtually none with boys (Nash, 1974 and Flerx, Fidler and Rogers, 1976). Both the early evidence of sex-role stereotyping for boys and girls and the later rigidity of boys in the face of pressure to change, suggest that the school must seek to affect change through the family. The father, as the one who most influences his child's sex-typing, must be the main target of these attempts. The school, for the most part, deals with mothers, since they are usually more available for conferences. Since most of the nursery-elementary teachers are themselves female, there is probably greater comfort in same sex relationships. The father is the one who will probably raise most objections to the fostering of androgyny in the schools and as the one who most influences his child's sex typing, must be made a partner to shifts in school attitudes and policies. Failure to do so risks sabotage by fathers, conflict within the child, ineffectiveness of the school's attempts and increasing dissatisfaction with the schools.

Why is it that boys are more resistant to change than are girls? Two plansible explanations are the greater sex-typing pressure placed on boys than on girls and the higher status of the male. It would seem that only if boys are freed from this excessive pressure (defined as more pressure than is placed on girls) will boys be able to openly avail themselves of school-presented opportunities for androgyny, as well as to develop a less stereotyped attitude toward girls. The excessive sex-typing pressure has broad ranging effects--none of them positive--for the advancement of androgyny, namely: (1) It encourages the status differential by necessitating boy's denigration of taboo female activities as "sissy stuff;" (2) it puts additional limitations on boys' behavior and arouses tension within boys which is probably expressed in increased aggressiveness or even higher activity level, further differentiating boy and girl behavior; (3) it also might increase

the importance of their sex-typing and the consequent reliance on peers for self-definition--making adult influence less likely.

Parents, especially fathers, must be educated to avoid this differential sex-typing pressure. Boys should be allowed to play house, dolls, cooking, sewing, etc., just as freely as girls are allowed to play cowboys, cars, cops and robbers, etc. Perhaps we are yet a good distance from complete freedom from sex-typing with girls and boys allowed to choose activities, toys and playmates strictly and completely according to temperament. Perhaps this is not even a realistic goal. What appears to be certain is that what we have labeled the "excessive" stereotyping of boys is undesirable.

The school can play an important role in pointing out to parents the importance of allowing their boys, in particular greater sex-role freedom and providing group support and concrete suggestions for parents wrestling with these attitude changes. On the other hand, it appears that girls also suffer from all sex-typed areas such as dependacy. Further research is needed to investigate specific ways in which girls are more dependent than boys and what parents do to foster this type of behavior. What exactly - if anything - do parents do to increase timidity in their girls? What do they do to increase girls' sensitivity to social approval? How do they increase boys' aggression and heightened activity level? Only when such information is available can the schools begin perhaps to educate parents, to raise consciousness in comparing what parents are doing and its results with the parents' stated aims for their child.

The bulk of the evidence suggests that by age 3 the process of sex role stereotyping is in full swing via toy selections, activities promoted, and parental reinforcement or differentiated shaping of particular types of behaviors. However it is also suggested that there is an increase over the years, e.g. between 4-8 years old. (Masters and Williams, 1976) It is also evident that sex-typing socialization pressures increase with age (Block, 1977). These facts point to the need for early (nursery) attempts to influence parents; but they also suggest that any point up until the age of 8 and possibly thereafter would be a very worthwhile point of intervention.

Implications for Further Research

In this section we shall attempt to outline research in the area of socialization practices necessary for providing information to the schools in their attempt to foster a more androgynous approach. For a more theoretical tack, the reader is directed to the excellent critical assessment of the area by Block (1976 A & B and 1977, in press).

There are three major areas for further research with important implications for school programming. These are: broad-scale use of an androgynous scale, simulataneous use of several measures of child rearing practices, and the study of targeted areas of socialization practices where sex differences might be expected using differentiated behavioral criteria.

Androgynous Scale. A major thrust of past research has been to assess the effects of various parental behaviors, attributes, and socio-cultural variables on the sex-typing of children. The tacit assumption underlying this research has been that the more sex-role appropriate the child scores on various measures of sex-typing (orientation, preference and adoption) (see Biller, 1974), the better. In other words the masculine boy and the feminine girl are the positive standards against which child-rearing practices are measured. This view is still promoted by some (Tomeh, 1975) but it has more generally been seriously questioned by the feminist literature and by specific findings. For example, Sears (1970) found that femininity in both sexes was associated with poor self-concept, aggression anxiety, high self-aggression, high prosocial aggression and low antisocial aggression (i.e., fearfulness and insecurity). Others also have found that the ideal female role is undesirable (e.g., Block, 1973 and Broverman, et. al, 1972). Herzog and Sudia (1973) have pointed out that the Masculine-Feminine Scales in use embody outmoded conceptions of sex-typing. Furthermore, they continue, the masculine ideal set forth in the scales is replete with "machismo," surely not a desirable goal.

In the previous section we pointed out how a high degree of sex-typing is bad for both boys and girls. We are now faced with a most difficult question: specifically; How much sex-typing is enough, not enough, too much?

In order to meaningfully answer questions regarding conditions fostering a "healthy sex-typing" for both girls and boys we need a whole new body of research data studying the relationship between degree of androgyny (both in activities and traits) and the following variables: anxiety level, self-concept, school achievement, peer-relationship, heterosexuality, adult occupation adjustment, age, socio-economic level and parental role-differentiation. We can then begin to have some solid information about how "healthy" is an androgynous personality and outlook, how much androgyny is healthy at different ages and sociocultural contexts and what background variables are associated with healthy androgyny.

Bem (1975; 1976) has made an important first attempt to measure androgyny and its correlates. She suggests that it is the person with the high degree of both positive male and female traits who is most desirable as compared with a person who is low in both male and female

positive traits. A body of literature regarding androgyny would give a more solid base for school attempts to provide equal opportunities for boys and girls as well as basic information necessary for handling parental concerns.

Measures of Child Rearing Practices. Studies assessing the relationship between sex role and childrearing practices have most often used either a questionnaire regarding practices, naturalistic observation or laboratory observation. Relatively few studies combine questionnaires with an observational approach. (Maccoby and Jacklin, 1974). In dealing with parents and attempting to influence their behavior we must know how what parents think (or report that they do) is related to what they actually do.

Thus, parents may think that they are relating in a non-sex typed way when they are actually responding differentially on the basis of sex. Block (in press) suggests use of a standard instrument assessing childrearing practices, across a variety of settings and experimental situations.

It is also possible to find discrepancies between what parents say they want for their child and what they say they do. For example, Fagot (1974) found that there were no differences in parents' reactions to children between parents who checked many behaviors as sex appropriate and those who did not--despite the fact that there were large differences in parents' values about sex-typing. It would seem logical to attribute this discrepancy to the effects of culture change. In accordance with Freudian notions, it would seem that the unconscious determinants of behavior linger behind the conscious influences.

There is some evidence that parents' ideals, perceptions and behavior are somewhat influenced by the age of the child (Block, in press) and by their socioeconomic level (Lynn, 1974). Thus, these variables would also need to be accounted for.

We are suggesting that the correspondence among the following measures be examined across various ages of children, and socioeconomic levels: (1) what parents say they would like for their children regarding trait and sex-typing and how strongly they feel about this; (2) how parents describe their own behavior and that of their children; (3) what parents actually do (observational measures). Three reasons may be proposed for investing in such research. First, it would aid in understanding the determinants of parents behavior in reinforcing or failing to reinforce various forms of sex-typing in their children. Second, it would enable us to know what school changes regarding sex-typing will be palatable to parents of various socioeconomic levels, helping us to answer the question of how fast we can move. Third, such information would give school personnel a more solid basis for communicating with parents. Such research would help school personnel to more fully appreciate and respond to parental preferences and sentiments.

Target Areas of Socialization Practices. As Block (1976) has succinctly commented, "attempting to make sense of an inchoate field - and the study of sex differences is such a field - is a difficult, complicated, arbitrary and therefore a premature undertaking." (p. 285)

As we have seen the global definitions of behaviors used by Maccoby and Jacklin (1974) and others have yielded clouds of fog. We therefore suggest selecting well-defined, specific areas of behavior in which sex differences are most expected and where differences have critical implications for school programming.

Let us mention a few of these: (1) One of the aspects of "dependency" thought to be most typical of girls and most detrimental to their emotional growth is the strong need for adult approval. How does the school respond to this? Another critical area of independence is what Saegert and Hart (1976) refer to as "environmental competence" which includes spatial freedom and freedom to explore the environment. It has been suggested that girls are in some situations "proximity-maintainers." Further research should address itself to what parents do, if anything, to relatively limit girls' exploration of their environment and how this may relate to differential response of teachers to boys and girls in regard to distal-proximal measures (Serbin, et. al, 1973). (2) Parental reaction to competititve and dominance behavior in boys ard girls seems to have received little attention in the experimental literature and may be highly relevant to academic functioning and later occupational success. Maccoby and Jacklin (1974) report on but two studies in this area. (3) Another important area is activity level. Maccoby and Jacklin (1974) report on parental responses to activity level only up until the age of 5 months. Boys have been found to be more active than girls particularly in the presence of peers. (Maccoby and Jacklin, 1974, Block, 1976[6], Birns, 1976) What do parents do to increase, channel, discourage high activity levels in boys as compared to girls? Again, how does this relate to teachers' practices?

One must mention in this context, two areas which have recently been given much attention. The first is the great importance of including the father in such research. Block (in press) points out that "in the studies contributing to the Maccoby and Jacklin evaluation of differential socialization for boys and girls, mothers as respondents account for 49% of the studies; fathers as respondents are the focus of inquiry in only 9% of the cited studies." As mentioned before, significant differences between fathers and mothers have been shown in their socialization emphases for boys and girls (Block, 1977, cited 10 references); and the father has been shown to be the major sex-typer of boys and girls (Lynn, 1974; Block, 1977). Additionally it would be important to know which areas of socialization are more the fathers' domain and which the mothers'. Only when these questions are clarified can we begin to try to influence behavior of both parents and teachers in ways more beneficial to achievement of equal opportunities for boys and girls.

Sex Role and the Mass Media

This section of the report presents a summary of the major research trends and findings on the image of males and females as presented in the mass media, and the possible influences that such representations have on the roles of growing children. As Comack (1975) has said, "it is difficult to generalize about such a multitudinous literature," but this review will focus on the following main areas:

Sex role stereotyping in children's television programs

Sex roles in daytime and primetime television

Television advertising

The developing child as viewer

Evidence of the effects of television on children

Sex-role stereotyping in children's books

Sex roles in women's magazines

Implications and direction for future research

I. Children's Television Programs

"For most American children television has become an early window into the world" (Liebert, 1973) and when one takes into account that at a very conservative estimate, the average child watches 16 hours of television a week, and by the time he/she is 10 has viewed more than 6,000 hours of television, including some 220,000 commercials (McGhee, 1975), the magnitude of television's potential influence over the developing child cannot be overlooked. Another alarming statistic (Schramm, 1961) is that by the time the average child reaches 18 years, she/he has spent more time watching television than being in a classroom and on any other activity except sleep. The surgeon General's Report (1972) notes that the same is true for preschoolers. The potential effects of such heavy viewing on sex role socialization deserve close scrutiny.

The vast majority of research in this area uses the methodology of content analysis on such variables as ratio of male to female/girl to boy characters, sex role categories, behavior categories, occupations of the two sexes, interactions between males and females, role in plot, and in general the image of males and females as represented in children's

television programs, educational television, cartoons and family programs. Research in this field hrs been reviewed by Busby (1975) and "Women on Words: Channeling Children" (1975), can be summarized as follows:

> Male major/minor characters outnumbered female major/minor characters; television males had much broader occupational roles than did females; females were shown as incompetent and as the butt of comedy (Channeling Children, 1975).

Dohrman's sex-role analysis of four educational television programs indicated similar trends, with females grossly underrepresented, in particular female children. Females were symbolically equated with characters traditionally imputed to minorities and lower rungs of society. These trends were found to cross racial lines and to persist for non-human categories (animals, fantasy creations, animated). Males tended to elicit more active masterful behavior, and to dominate in ingenuity, achievement and bravery; females are more likely to be more passive and helpless, the target of rescuing males. Interaction analysis indicated that only 13% of all male interactions were with females, whereas over half the female interactions were with males, with the women playing the dependent, inferior role.

Another common finding of most studies is that the traditional view of womanhood is presented, with women portrayed as "dependent, and performing expressive and socio-emotional roles within a family context" (Long & Simon, 1974). They are usually shown as being silly, overemotional and dependent on husbands and boyfriends. The above authors concluded that the portrayal of women does not reflect "the new roles and perceptions that many women have of themselves or want for their daughters."

Sternglanz and Serbin (1974), in an observational analysis of male and female role models in 10 popular commercially produced children's programs, noted that sex models presented to male and female children are strikingly different and convey very different messages about sex-appropriate behavior. These authors found striking differences both in number of male and female roles (more than twice as many males) and the types of behavior emitted by male and female characters- with males more often portrayed as aggressive and constructive, and females as passive and deferent. Differentiated consequences for behaviors were shown, with males more frequently rewarded, and females more often receiving no consequences, apart from their being more often punished for high levels of activity than males

Levinson (1975), in an analysis of sex role portrayals in cartoons found evidence of similar examples of stereotyping, with particular note to the under-representation of female characters and voices (males outnumber females 3:1), and vastly different occupational and plot roles, with males in a greater number and variety of instrumental roles and females in more restricted stereotyped domestic, socioemotional roles. The author concludes that television portrayal of the sexes in cartoons "reflects not real world events, but rather real-world values concerning traditional sex-role assumptions."

Evidence for "outdated sex-role concepts on a progressive program," the widely acclaimed "Sesame Street," has been documented by several investigators (Bergman, 1972; Cathey-Calvert, 1973), indicating that even carefully developed and enlightened television programs are not free of sex-stereotyping.

In summary, the view of women given to children on the television screen is that they are relatively less important (appear less frequently), have restricted abilities and occupations, and are not as autonomous, independent, competent individuals as are men. This will have great importance on the evolving sex-role identity of young boys and girls, with the message that the future holds very different expectations for them, and that their gender will determine what they are likely to become, how they will behave and their relative status and value.

II. Daytime and Primetime

Busby (1975) has summarized research on sex roles in the day time serial indicating that males greatly outnumber females, the marital status of women is given greater relevance than that of males, and the occupational range for women is more limited, with the top ranking occupation for women being housewife. Only 19% of all women were portrayed as professionals, while over 50% of men were professionals (Downing, 1974).

Another striking finding is that most of the women who appear on TV are younger than men "the opposite of the actual situation, wherein females outnumber males consistently after the age of 15" (Busby, 1975). Another finding is that men dominate and control most of the action (advising and ordering) of both daytime and primetime serials, even in the former in which "masculine" subjects are minimal (Turow, 1974). Females play very different roles from males, with females frequently playing comic light roles and men cast in more serious roles. More than half the women were married whereas relatively few men were married. Almost two-thirds of

women were unemployed, whereas fewer men were not shown in occupations. Males played more violent roles, whereas females were often the victims of violence (Tedesco, 1974).

Semantic differential studies indicate that there are many descriptions which reliably distinguish between male and female characters in television programs, with males rating of such items as more ambitious, more competitive, independent and dominant, and less sensitive, affectionate and emotional, etc., whereas females were rated in the opposite direction (Busby, 1975).

These studies imply that there is a consensus among viewers of television that the sexes differ in the way they are represented, and that these differences are along traditional, sex-role stereotypes. Few women are presented as autonomous, active, competent women working effectively in the outside world in academic, professional and exectuvie positions--which is closer to the reality for many women today (Long and Simon, 1974). Young girls are being socialized to see that their place is in the home, and aspirations for achievement are incompatible with the traditional family role for women.

III. Television Advertising

A great deal of research has been done on the image of men and women as they are represented on television commercials, with almost unanimous conclusions that women are shown in traditional stereotyped roles, and not as autonomous, independent beings fulfilling a wide range of activities as they do in real life.

Courtney and Whipple (1974), comparing the findings of four content studies of images of males and females in commercials, conclude that "men and women are presented differently in advertising and that each sex is still shown in traditional roles." In all four studies a relationship was found between the sex of the characters and the product category advertised. Thus women appeared in commercials related to kitchen, bathroom, personal hygiene and cosmetics; in comparison men were shown with automobiles, etc., or in executive and business roles. Men were significantly more likely to be shown outdoors, or in work settings, while women were usually shown in the home setting, frequently with children. The average age of women was younger than that of men (Domick and Rauch, 1972; Hennessee and Nicholson, 1972).

An analysis of sex-role behavior patterns revealed significant differences in the behavior patterns of men and women. Men appeared

more frequently (60% of all characters), appeared in more authoritative roles, e.g. narrating, giving product information, advice and displaying dominance. Females appeared less often, were portrayed as dominated, and in situations where they showed competence and achievements they tended to be related to sex-stereotyped fields, e.g., housekeeping.

The image of women being presented in television commercials does not reflect recent trends and changes in the real world, and as noted by several writers, there is resistence on the part of advertisers and programmers to the presentation of a more even-handed treatment of women in commercials. "Advertisers attempt to sell goods and services to real people who exist today in the U.S. and not people as NOW (National Organization of Women) wishes they would become" (Courtney, 1974). Busby notes that "researchers might gain a greater understanding of social sex roles by paying particular attention to male roles." These too are stereotyped in commercials, presenting men as strong, dominating, aggressive, sexy, independent, etc., while he is away from his family. But in contrasting comparison the "American father and husband is portrayed as passive, stupid, infantile, and emasculated. In order to sell a product advertisers prefer to choose young, attractive females to fulfill traditional roles showing traditionally "feminine" things, and stereotype men dealing with the real, objective, "masculine" world.

IV. The Developing Child as Viewer

Several researchers have devoted their attention to the questions of how variables such as age of the child, amount of time spent watching television, etc., will affect relative amount and type of influence television will have on his socialization experience. Collins (1975) and Collins and Westby (1975) noted a relation between the age of children, the level of complexity of the material and the way children process social information from televised programs. They noted that younger children (2nd and 3rd graders) show relatively greater attitudinal and behavioral effects than older children. Collins suggests that one reason for this is that younger children are less able to comprehend interrelationships of important social cues and thus do not get the modifying effects of social information about motives and consequences. Younger children do better when there is a small amount of information whereas for older children (6th-9th graders) there is increased straining for meaning and causal sequences. One implication of the above is that children are likely to be particularly susceptible to socialization cues presented in commercials which are brief and do not involve causal relations. It is significant

that the public broadcasting program, "Sesame Street," makes use of these very principles, and bases much of its instruction on the model of commercials.

A significant relation has been noted between age of children, amount of time spent viewing television and subsequent sex-typing, as measured by IT test of activity and toy preference (Frueh and McGhee, 1975, and McGhee, 1975). They found that for both boys and girls traditional sex-typing increased with increasing age. These studies imply that since popular commercially produced children's programs portray different male and female sex-roles along traditional stereotyped lines, the more children are exposed to this type of socialization model, the more they are likely to be influenced in their own subsequent sex-role identity.

V. Evidence of the Effects of Television on Children

A great deal of research has been conducted to indicate the incidence of observational learning in the absence of immediate practice or reinforcement (Bandura, 1973), and to show that children do imitate behavior they observe--especially behavior seen on film (television). Comstack (1975) in his review of findings of the Surgeon General's Scientific Advisory Committee on Television and Social Behavior (The Surgeon General's Report) 1972, notes some of the main issues concerned with the effects of television on children: patterns of exposure (Lyle, 1972; Lyle and Hoffman, 1972); the nature of their viewing experience (Bechtel, Achepohl and Akers, 1972); the way children respond to television (Lyle, 1972); and certain more direct effects of values, attitudes and behavior (Dominick and Greenberg, 1972; Gerbner and Gross, 1974; McCombs and Shaw, 1974; Hollander, 1971, Bandura, 1973). Some of the more striking observations include: (a) The amount of television varies widely, but in general there is an increase during elementary years, followed by a decrease. The amount of viewing is greater for persons who are Black, are from families of low SES, lower academic achievement and I.Q. (b) Viewing by young persons is highly active and discontinuous. "The amount of viewing is an index of involvement in a variegated experience...and does not represent the number of minutes or hours attention given to the screen." The amount of viewing cannot therefore be safely used as an index of real exposure to a particular class of television content since viewers are simultaneously being exposed to many different classes of experience. (c) Television represents additions to life experience of children and plays a very real part in their lives, in particular those of lower socioeconomic families and in cases where the environment does not provide counter-information or first-hand experience. (d) Television

viewing attitudes and classes of behavior relevant to television have been found to correlate with various family attributes and constellations (Other than race and income). (e) The evidence of the possibility of observational learning of a variety of classes of behavior, both socially desirable and antisocial, does not imply automatic adoption of those behaviors. "The actual performance of an acquired/observed act depends on various factors relating to the television stimuli, the viewer, and the environment" (Bandura, 1973). (f) With regard to television violence and aggressive antisocial behavior, Comstock is cautious, concluding that "the most scientifically justifiable conclusion, given the available evidence, is that violent television entertainment increases the probability of subsequent aggressive behavior on the part of children and youth". (g) Comstock emphasizes that although the limits of social science methodology prevent conclusive inferential leaps about television viewing and direct effects on behavior, there is sufficient indication that the direction (if not quantity) of effects is serious enough to warrant concern and action. He makes reference to the "hidden conflict" about findings from television research, namely the vested interests of the private television industry in maintaining the status quo.

Some equally serious inferences can be made from findings on sex-role socialization models presented in television programming. "Gender is one means of dividing characters into separate but not equal spheres which serve symbolic functions" (Dohrman, 1975). The fact that males dominate the cast of characters and the action implies enhanced social status and significance of males. By emphasizing the domesticity of women, and the independence of men, male and female televised role models reinforce sex stereotypes which define "feminity" in passive, dependent terms and "masculinity" in active mastery terms, thereby enhancing the male image and diminishing the female (Dohrman, 1975). "In general, women's roles and fates are one of the most sensitive indicators of the distribution of power and allocation of values that the symbolic world bestows upon its victors and victims" (Greenberg and Gordon, in Comstock, 1972).

VI. Sex-Role Stereotyping in Children's Books

Children's books have been relatively well investigated as to the type of sex-role socialization models they portray to the young reader, although as Busby (1975) points out these studies are frequently subjective and lack thorough methodological design and data analysis. One consistent finding is the "Invisible female"

syndrome, i.e., the significant under-representation of female adults and children (Weizman, et. al., 1972; Feminists on Children's Media, 1971; Women on Words and Images, 1972). When females do appear, their characterization reinforces traditional sex-role stereotypes. Thus while boys are active, adventurous, initiators, and are frequently shown outdoors, ("masculine outer space" - Erickson) girls are passive, follow, serve others, and are usually indoors ("feminine inner space"). While men are portrayed engaging in a wide variety of occupations and activities, women are represented only as wives and mothers (house-keepers and baby-care). Both males and females are in fact unrealistically portrayed (in terms of today's social reality) with women only in the home, often nagging, and never working outside the home. Conversely, no fathers are shown in the home and in care-taking, nurturing activities.

The feminist study (1971) proposes four categories for children's books: sexist books (i.e., emphasis on traditional roles, with women passive, lacking initiative, enterprise and intellect); cop-outs (where rebel tomboys turn into good girls); especially for girls (a list of books for boys not to read with a predominance of love, romance, and companion books); and positive images (girls as active, intelligent, competent). The dirth of books in the fourth category emphasizes that "our current rigid role definitions require that a boy be all that a girl should not be: unafraid, competent, strong." Busby refers to other studies which concur that in most children's books women are under-represented, and portrayed as uninteresting, passive, stereotypes whose realm of influence is restricted to the home.

As in television, the treatment of females in children's books differs from that of males both in quantity and quality, so that children's books do not reflect the extended world of multiple choices of many women today. These books reinforce the image of the television that gender determines what boys and girls do, how they behave, and what the future holds in store for them.

VII. Sex-Roles in Women's Magazines and Fiction

The findings of the image of women as represented by women's journals and magazines concurs with the findings to date (Franzura, 1974; Lefkowitz, and Ray, in Toward a Sociology of Women, 1972, Ed. Safilios Rothschild). Most studies concur on the "happy housewife mystique," with women's identity defined in terms of the absence or presence of men (single and looking, spinster, house-wife, mother, widowed, divorced) implying that they have no independent existence, and that work plays a secondary role in women's lives. Most women

are portrayed as working in the home, but of those engaged in remunerative occupation outside the home, most had low status jobs. Those who had higher status jobs were either single or unhappily married, implying that a successful career was not conducive to happy family life. Franzura (1974) comparing "working women in fact and fiction" examines the relation between self-concept, feminine role concept and later career choice. Girls who have been socialized to believe that a woman's place is in the home, and that men devalue intelligence and competent women, will make early decisions that a career is unwise, which will influence academic and other achievement aspirations. As Sally of "Peanuts" cartoon strip said: "If all I'm going to be when I grow up is a housewife and mother, why do I have to go to kindergarten?" The image of women is clearly still aimed at helping women fulfill themselves best in their "real" role which is to marry, have a family, and if they work, it is not to pursue a career. "The 'career woman' label is still a social stigma" (Ray, in Safilios-Rothschild, 1972), according to the image in woman's magazines and fiction.

VIII. Implications and Directions for Future Research

From the research on the mass media, it is evident that traditional sex-role stereotypes are present in all the media: television, children's literature, commercials, women's magazines. Research on observational learning indicate the influence of socialization models on subsequent behavior and attitudes. Thus it may be presumed that constant exposure to differential patterns of behavior, activities, interactions, occupations, competencies and achievement on the basis of sex will reinforce the original socialization patterns that the child has been confronted with since the assignation of the blue or pink ribbon, that the child's gender will determine the role and behavior expectations for the future. Even in families in which the socialization models have tried to present a more "equalized" approach to the child, and the parent roles do not conform to the stereotypes presented on the mass media, the intensity of the exposure to such sex-types socialization models will have a very strong counter effect.

Busby (1975) poses four issues of relevance to the social scientist in trying to evaluate the role of the mass media in sex-role socialization:

(a) Will loosening of traditional sex-roles in broadcasting imagery hamper media use and/or product sales?

(b) What are the limits on the expansion of roles for both sexes that the majority of Americans are willing to accept?

(c) How rapidly are traditional sex roles changing and in what areas?

(d) How will these sex-role changes in our social structure be transmitted to our broadcasting media content?

Both male and female stereotypes predominate the mass media. Will changes in quantity and quality of female and male roles in the mass media result in different socialization influences? Is there any way of determining the relative influence of mass media as opposed to influences in the home, the school, the institutions?

How can one arrive at more scientifically reliable measures of actual influence of the media on behavior and attitudes? What research methodologies might provide more situationally specific experational definition of the influence of the media? To date the majority of the research was reflected on content.

Do boys and girls accept and believe the relative higher status assigned to males in our society, and does this influence their academic achievements and aspirations?

How pervasive are traditional sex-role definitions, and how would changes in these affect ongoing social structures?

Much research has been done on the high price girls have to pay--in terms of social, academic and emotional development--because of their gender. But relatively little has been done on the influence of the high expectations boys fulfill their stereotypes of being achieving, assertive and aggressive. Equally little has been done on the gap between a man's self-image and ideal image as "superior being."

One of the most important areas which should be more fully investigated is that of self-concepts of girls and boys being confronted with many conflicting channels of socialization. What changes will best contribute to more positive, realistic, harmonious self-concepts?

The School's Role in Sex Role Socialization

Since it has been shown that children come to school already sex-typed (Kohlberg, 1966; Ward, 1969; Fling and Manosevitz, 1972; Nadelman, 1974; Thompson, 1975; and Flerx, Fidler, and Rogers, 1976), it seems clear that the school not only has to stop its own sex-typing influences but also has to counteract the influence of the

the children's sex-typed attitudes. The school's sex-typing influences tend to be of three kinds: (1) the sex-typing effects of differences in teacher behavior toward boys and girls, (2) the sex-typed classroom materials provided, and (3) the sex-typed example of its own organizational hierarchy and administrative practices.

I. Sex-Typing Influences of the School

Teacher Behavior Toward Boys and Girls

Some differences in teacher behavior towards boys and girls seem to be based on traditional sex-role definitions, while others appear to be based on "true" sex differences in children's behavior. In addition, both types of differential treatment appear to contribute to further sex-typing. There is some evidence that teachers have different expectations for boys and girls based on traditional sex-role definitions and that they treat the sexes differently based on these expectations. Adams and La Voie (1974) found that elementary teachers responding to photographs of boys and girls rated the boys significantly lower than the girls on attitudes toward school and work habits and marginally lower on personal attitudes. In a survey of teacher attitudes, Chasen (1974) found that preschool teachers believed that girls play more often in the doll-house area and clean up more readily, while the boys play with blocks more often. Goebes and Shore (1975) administered a semantic differential to teachers and found that in the abstract, teachers considered girls to be significantly closer to the ideal on the sloppy-neat continuum and the creative-ordinary continuum, while boys were rated significantly closer to the ideal on the active-passive continuum and the independent-dependent continuum.

Mulawka (1972) observed 28 classrooms from K-3 and found that while teachers did not appear to treat the sexes differently in the assignment of either work or play activities, they did assign far more masculine stereotyped housekeeping chores to boys than feminine stereotyped housekeeping chores to girls. Chasen (1974) also found evidence that teacher treated boys and girls differently in accordance with traditional sex-role definitions. Preschool teachers were asked to complete a checklist regarding their classroom behaviors toward boys and girls. The results indicated that teachers encouraged boys to be more active and aggressive and complimented boys on their strength more often than girls. Further, teachers did not encourage boys to play with dolls.

There is some evidence which suggests that teachers treat boys and girls differently by responding to objective differences in behavior which children of the two sexes display. Some of these

differences in behavior are no doubt reflections of earlier sex-typing of the child's behavior, but some of them appear to reflect "true" sex differences. For example, the research reviewed earlier indicated that boys seem to have an innate propensity towards more aggressive behavior and that they show an early and strong tendency toward higher activity levels than girls. It should come as no surprise then that in a school atmosphere emphasizing obedience, compliance, and docility, boys are more disruptive and violate more behavioral rules than girls (and thus are the focus of more teacher criticism than girls). Serbin, O'Leary, Kent and Tonic (1973) observed child behaviors and teacher responses for 225 3 to 5-year-olds. They found that boys were significantly more aggressive than girls and that the average rate of teacher response to aggression was significantly higher for boys than for girls. Nulawka (1972) found that teachers were more prone to use negative reinforcement patterns with boys than with girls, both when boys were learning academic subjects and when they were being verbally or physically aggressive. The results with regard to the positive reinforcement of the children's behavior showed no differences by sex. Good and Brophy (1971) observed teacher/child interactions during reading instruction in four first grade classrooms. While results indicated that teachers extended equal treatment to boys and girls during reading instruction, they also indicated limited sex effects when data from all aspects of classroom life were considered. In total classroom activities, boys were found to produce more correct answers and to receive more criticism than girls. Brophy and Good (1970) observed dyadic interactions between teachers and selected students in four first grade classrooms and found that boys received significantly more behavioral criticisms than girls. They concluded that these criticisms were attributable to more frequent disruptive behavior among boys (which brought on the criticism) rather than to a teacher bias toward being more critical of boys than girls in equivalent situations.

Another example of differential teacher treatment based on objective sex differences might be different amounts of instructional contact due to different maturity levels at school entrance. In her review of evidence in this area, Sexton points out that,

> Because of their rapid maturation, girls are said to be ready for school at age five years and nine months, while boys are not ready until about age six and a half. Yet both actually enter school at the same age, and are given the same work to do. Since boys are more immature, they cannot compete with girls or successfully perform many academic tasks. (Sexton, 1970, p. 105).

It seems that if teachers were to respond objectively to this difference, they would have to provide boys with more instructional contact. It is not clear based on the research available at this time whether this is actually the case. Of five studies reviewed, one study found no sex differences in the amount of instructional contact received, two found boys got more, and two said that girls got more. Good and Brophy (1971) observed teachers and children during reading instruction in four first grade classrooms, and their results indicated equal teacher treatment of boys and girls. However, it must be remembered that reading instruction tends to be one of the more highly structured activities in first grade and that this structure may have tended to attenuate sex differences in this study. Brophy and Good (1970) observed dyadic interactions between teachers and selected children in four first-grade classrooms. They found that when teacher/child dyadic contacts of all types were totaled, boys had significantly more work-related interactions and were afforded significantly more response opportunities than girls. Serbin, O'Leary, Kent and Tonick (1973), observing child behaviors and teacher responses for 225 3- to 5-year-olds, also found that boys got disproportional amounts of instruction when compared to girls. Biber, Miller and Dyer (1972), on the other hand, found that girls received more instructional contact than boys. They observed teacher/child instructional contacts and teacher reinforcement of instruction for 200 4-year-olds in 14 preschool classes. They found not only that girls received more instructional contact than boys, but also that girls received more positive reinforcement for instruction. However, since there was no difference between the sexes in the number of reinforcements received per instructional contact, the researchers concluded that the results reflected primarily a higher number of instructional contacts for girls rather than a tendency of teachers to be more reinforcing to girls. Fagot (1973) also found that girls tended to get more instructional contact than boys. She reports the results of three observational studies conducted in primarily white middle class preschools in which the child's task behaviors and the teacher's responses to the child's behavior were the focus of observation. The results indicated that although there were no sex differences in the children's task behaviors in the three studies, there were consistent differences in the teachers' behavior toward the two sexes. Teachers appeared to instruct girls more often than boys in all three studies, answering their questions more often, giving them more favorable comments, and directing their behavior more frequently. More research is needed to determine whether boys receive more instructional contact than girls.

It is clear that differences in teacher treatment of boys and girls based on traditional sex-role definitions have a sex-typing influence on children. However, how differences in teacher treatment based on "true" sex differences might contribute to children's further

sex-typing is less obvious. Dweck (1973) suggests one way with regard to the disproportional amount of behavioral criticism boys receive. She says that because boys receive so much criticism directed toward their conduct rather than their intellectual performance, they tend to attribute their task failure to lack of effort rather than to lack of ability. Girls, on the other hand, follow directions, exhibit few behavioral problems, and are generally conscientious so that the teacher criticism they receive tends to be more specifically directed at intellectual-academic failures. As a result, girls tend to attribute their task failures to lack of ability. These sex differences in responses to failure--boys maintaining confidence in their ability and feeling they can succeed if they try harder, while girls feel they don't have the ability to succeed--are artificial in the sense that they do not reflect innate ability differences, yet may result in very real ability differences later on.

Another way in which teacher response to "true" sex differences in aggression and activity level might contribute to artificial sex-typing might be through differential patterns of teacher attention. Since teachers are concerned with maintaining order and since boys misbehave more than girls, is it likely that teachers learn to "keep an eye" on boys at all times. This could account for the findings of Serbin, O'Leary, Kent and Tonick (1973) that boys received a fairly constant rate of teacher attention regardless of their distance from the teacher while girls received more teacher attention when near the teacher than when further away. The effects of this kind of differential responding by the teacher might be to reinforce girls for proximity seeking--one category of dependent behavior.

It is even possible that sex differences in children's maturity level at school entrance could contribute to the creation of further sex differences. It was suggested earlier that boys are less mature at school entrance than girls and thus may get more instructional contact with teachers to help them meet the same performance standards that girls meet with little instruction. If this is true, it would be reasonable to expect that boys would get more exposure to the teacher's problem solving processes, and more guidance on how to think problems through than girls, and that this would foster differences in intellectual functioning.

What can the school do to stop the sex-typing influences of differential teacher treatment of boys and girls? When these differences in treatment are based on the teachers own sex-typed attitudes, programs directed at changing these attitudes seem appropriate. Such programs should include helping teachers examine and change their sex-typed attitudes and provide feedback to them on their degree of success in

reducing their sex-typed treatment of their students. However, since the teacher is not the only sex-typing influence on the child, we must not expect to measure and evaluate changes in teacher behavior in terms of immediate effects on the children. Kesselman (1974) examined the impact of a teacher sex-role awareness course on the sex-typed attitudes of fifth and six grade teachers and their students. The results indicated a highly significant decrease in teacher sex-stereotyping scores and those of their pupils subsequent to the workshop. This suggests that the evaluation of these programs be directed specifically at changes in teacher behaviors until the confounding of the multiple sources of sex-typing influences on the child can be sorted out.

The school's solution to the sex-typing problem when the differences in teacher treatment are based on differences in behaviors the children themselves display seems to include both the teachers and the students. Through sensitization to the problem, teachers may be helped to avoid responding in ways which reinforce the children's sex-typed behavior. However, the main thrust of this solution involves attempts to counteract the children's own sex-typed attitudes and will be discussed later. It is clear that differential teacher treatment of boys and girls based on innate sex differences is a special case and that more research is needed before solutions can be offered.

Classroom Materials

The second major area in which the school contributes to the sex-typing of students is through the use of sex-typed classroom materials. By sex-typed materials, we are referring to materials which convey a sex-typed message in and of themselves. Materials such as dolls or trucks, which are commonly used in a sex-typed way, are not considered here to be sex-typed since there is nothing in the doll or truck itself which conveys a sex-typed message. Rather, the children have learned elsewhere that dolls are for girls and trucks are for boys, so that the sex-typed usage of such materials is reflective of the user's sex-typed attitudes. Research on sex-typed classroom materials consists primarily of studies involving content analyses of textbooks. One reason for this emphasis on textbooks is that in spite of all the educational advances made in recent years textbooks are still the basic teaching tool in most classrooms. They are also still viewed by many as containing the basic knowledge that children should acquire. This means that children not only receive a great deal of exposure to textbooks, but they also tend to view textbooks as an authoritative source of information. Textbooks thus can have a strong influrnce on children, and it appears that the incluence they are exerting is overwhelmingly sexist.

The research on textbook content reveals large sex differences in both the number and the nature of character portrayals. The evidence clearly indicates that males are over represented and females under represented in elementary textbooks. Weitzman and Rizzo (1974) systematically analyzed the most widely used textbooks for science, math, reading, spelling, and social studies, focusing primarily on the illustrations. Overall, they found that 69% of the illustrations were of males and only 31% were of females. They also found that as the grade level of the text increased, the proportion of adults in the pictures increased and the proportion of women decreased. Frazier and Sadker (1973) cite a study by U'Ren (1971) in which she surveyed the content of textbook illustrations and found that only 15% of the illustrations were of girls and women. She further found that the illustrations on book covers and chapter headings were invariably of males and that in group scenes the males nearly always outnumbered the females.

Several studies report findings of sex differences in the number of character portrayals specifically in reading texts. Britton (1975) analyzed 244 reading texts in 20 different reading series, tabulating the number of times males and females of various racial and ethnic groups appeared as main characters in the stories. She found that males were the main characters 3091 times as compared to 816 times for females. Weitzman and Rizzo (1974) examined the two most widely used reading textbook series and found 102 stories about boys and 35 about girls. Fishman (1976), in a review of textbook content analysis, cites two studies which had similar findings. The first was Wiik (1973) in which an analysis of 450 textbook literature selections revealed a total of 411 male human characters versus 87 female human characters. The second was by Frasher and Walker (1972) who analyzed first and second grade readers from four basal reading series and found males as main characters in more than three times as many stories as females. A study by Women on Words and Images (1972) examined 134 elementary school readers from 14 different publishers. A content analysis of the 2,760 stories in these readers revealed over twice as many boy-centered stories as girls-centered stories, three times as many adult male main characters as adult female main characters, and six times as many male biographies as females biographies. Frazier and Sadker (1973) cite a study of 144 reading texts by Miles (1971) in which boys were found as the main characters of the stories 881 times as opposed to 344 times for girls.

Weitzman and Rizzo (1974) also found sex differences in the number of character portrayals for textbooks in areas other than reading. They reported that in the most widely used science textbook series, three out of every four pictures were of males, making science the most male-dominated of the subject areas they examined. They found further that adult women were even more underrepresented

than girls in this science series, with only 20 percent of the total illustrations being of girls but a mere 6 percent being of women. They found the series of social studies textbooks they examined to be the least male-dominated of the five subject areas included in their study. Their findings still showed, however, that two out of every three pictures in the social studies series were males.

The research in this area also reveals distinct differences in the nature of male and female characterizations in elementary textbooks. One common finding is that males are portrayed in a much wider range of occupations roles than females. Fishman (1976) cites a study by the Committee to Study Sex Discrimination in the Kalamazoo Public Schools, which found men portrayed in 213 occupations versus only 39 for women. They further found that the most commonly occurring female roles were housewife, librarian, nurse, secretary, seamstress, teacher, and witch. Britton (1975) in her analysis of 244 reading texts from twenty different reading series found males portrayed in 3847 career roles and females in only 955. Weitzman and Rizzo (1974) examined the illustrations in the most widely used textbooks in five subject matter areas. Overall, they found that men were shown in over 150 different occupations while almost all the women were portrayed either as housewives or in traditional female occupations such as teacher, librarian, nurse, or sales clerk. Women on Words and Images (1972) analyzed the content of 134 elementary school readers from 14 different publishers and found sex differences in both the number and type of occupations in which men and women were portrayed. Women were found in only 26 occupations as compared to 147 different jobs for men and were consistently portrayed in such traditional feminine roles as teacher, nurse, governess, dressmaker, and telephone operator.

Several studies have found differences in the nature of male and female characterizations with regard to their activities and characteristics. Weitzman and Rizzo (1974) summing up the trends across subject matter areas, found boys' and girls' portrayals to be significantly different in five ways: (1) boys were portrayed as active and energetic while girls were portrayed as passive, watching, and waiting for boys; (2) most boys were shown outdoors while a greater percentage of girls were shown indoors; (3) boys were encouraged to be skillful and adventurous while girls were encouraged to pursue homemaking and grooming; (4) girls expressed a much wider range of emotions than boys; and (5) in a significant minority of illustrations with boys and girls, most of the action centered around the boys.

Differences in the nature of male and female character portrayals have also been found specifically in reading textbooks. Weitzman and Rizzo (1974) examined two of the most widely used reading textbook series and found sex differences in the nature of character portrayals.

They found that even female heroines in the stories reinforced the traditional female roles and that girls tended to deprecate themselves even when they succeeded. On the other hand, boys were shown as having a great deal of confidence and camaraderie. Two types of roles in which females predominated were also identified in this study: (a) mean or evil characters, and (b) characters portrayed as clumsy or stupid and the foolish object of a joke. Fishman (1976) in her review of the research in this area cites a study by Frasher and Walker (1972) in which they analyzed the content of first and second grade readers from four basal reading series. The results of this study showed that girls were portrayed in quiet games 60 percent of the time and boys only 20 percent. Further, it was found that girls were generally depicted in passive situations where they showed little creativity, initiative, or independence while boys were usually characterized as being assertive, brave, curious, and independent. Women on Words and Images (1972) classified and coded 2,760 stories according to dominant themes and found that boy-centered stories significantly more often contained themes of ingenuity, and cleverness; industry and problem solving ability; strength, bravery, and heroism; elective or creative helpfulness; apprenticeship, acquisition of skills, or coming of age; earning, acquisition, and unearned rewards; adventure, exploration, and imaginative play; and altruism. Girl-centered stories were found to contain significantly more themes of routine helpfulness; passivity and pseudo-dependence; goal constriction and rehearsal for domesticity; incompetence and mishaps; and victimization and humiliation of the opposite sex. DeCrow (1970) analyzed K-3 readers produced by ten companies. She found that no women were portrayed as working outside the home except as teachers or nurses and that even they were referred to as "Miss," suggesting that when a woman marries she leaves her profession. On the other hand, she found that men were shown working full-time outside the home but very little in the home. Girls were depicted as helping mother most, boys as helping some, but fathers were shown as doing no housework except traditional men's work such as gardening and taking out the garbage. She also found that the father was portrayed as making the decisions for the family, solving the family's problems, and providing the family's good times.

A few studies have looked at the differences in characterization of males and females in areas other than reading. In their examination of math texts, Weitzman and Rizzo (1974) found that most males were portrayed as being mathematically competent while some females were portrayed as being baffled by counting to 3 or 20. They also found sex-stereotyping in the examples and problems where women were shown dealing only with dividing pies and shopping and where a girls was shown as being paid less than a boy for the same work. Frazier and Sadker (1973) cite a study of math texts by Members of the Education Committee of the National Organization for

The sex-typed occupational portrayals of men and women in current textbooks do not reflect reality and mislead girls to expect too little and boys too much of their careers. Textbooks show women primarily in the role of housewife while recent statistics indicate that 48% of the women between the ages of 18 and 65 work outside the home (Fishman, 1976, p. 445). Further, when women in texts are portrayed in career roles, the roles are so few in number and so traditional in nature that the range of occupational choices girls consider may be limited. On the male side of the problem, male career roles portrayed in textbooks tend to be high status, exciting, and full of adventure. As Fishman points out, "...There are no stories which portray the routine of an office job, the boredom of assembly-line work, or the dull uncertainty of sales (Fishman, 1976, p. 445). This may cause boys to have unrealistically high expectations for their jobs and thus contribute to the widespread problem of job dissatisfaction. The differences in the nature of male and female character portrayals in textbooks clearly convey the message that females are inferior to males. Males are portrayed at the center of action and females are shown watching the males. Males are encouraged to be adventurous and females are encouraged to keep house for the males. Males do things and females have things done to them. All these themes reinforce the traditional sex-stereotypes which the schools are trying to change.

There are several steps the schools can take to counteract the effects of sex-typed classroom materials. Federbush (1974) has suggested the establishment of review committees to examine textbooks and other classroom materials for sex-bias. These committees could guide school personnel in the selection of new materials by advising them of the suitability of various materials with regard to their treatment of the sexes. They could also serve as pressure groups to publishing companies, informing them that their materials will be scrutinized for sex-bias, providing them with guidelines for acceptable portrayals of the sexes and advising them that sex-biased materials will not be purchased in the future. Some book companies have already published their own set of such guidelines which could be used (McGraw-Hill and Scott, Foresman). It is obvious that even by using the least sex-typed material available and by working for non-stereotyped materials in the future, teachers are still going to have to contend with sex-typed materials in their classrooms. Teachers can help to counteract the sex-typed messages in these materials by using them as examples in teaching their students about sexism. Gough (1976) has presented over 40 classroom activities suggested for this purpose

School Organization and Administration

The third area in which the school exerts a sex-typing influence is in its own organizational hierarchy and administrative practices. Although elementary education is considered to be primarily a female occupation, the positions higher in the power hierarchy are held pre-

Women in New York City (1971) which found that math concepts were frequently presented in social contexts which reinforce traditional sex role stereotypes.

Weitzman and Rizzo (1974) also found trends toward differential characterization of the sexes in science, spelling and social studies textbooks. In science, they found that boys were portrayed as controlling the action while the girls were either acted upon or were observers. They also found that science was portrayed as a masculine domain, omitting mention of famous women in science and picturing all scientists as males. In spelling, they found vowels shown as females who in the dialogue were yelled at, kicked out, pushed around, and told to shut up by male consonants. In the social studies they examined, they found a less sex-typed treatment of the sexes. They found a strong family orientation, portrayal of mothers as skillful, and presentation of fathers in a warm parental role. However, mothers were limited to teaching traditional feminine skills to their daughters and fathers to teaching traditional masculine skills to their sons. Also, once the focus of study moves away from the home, women were found to be absent from the discussion of history, government, and society.

Although the vast majority of research on sex-typed classroom materials has been focused on textbook content, a study by Mulawka (1975) suggests that similar trends can be found in other classroom materials. Mulawka examined the content of pictorial and written materials displayed in 28 classrooms from K-3. The results showed these materials to contain significantly more references to males than to females in both wage-earning occupations and in leadership roles. This same finding also held true for the pictorial content of the textbooks.

The research reviewed above clearly indicates sex-bias in the content of elementary school textbooks. There is also some evidence that attitudes can be influenced by the content of reading textbooks (Litcher and Johnson, 1969). When this influence is combined with the authoritative status children attribute to textbooks and the tremendous amount of exposure that children have to texts, it seems reasonable to conclude that the sex-bias found in these materials may foster sex-bias in children's attitudes. The specific sex-typed effects that textbooks have on children's attitudes can only be deduced from the sex-biased trends in character portrayal found in textbooks. For example, the overwhelming numerical domination of male characters restricts the number of female role models available to children and may carry with it the implication that females are less important than males. Not only are there fewer stories about famous women but there are also fewer females than males in stories about everyday life, suggesting, as Child pointed out, "...that the only people even in everyday life who are worth writing about or reading about are boys and men." (Child, Potter, and Levine, 1946, p.49).

dominantly by males. Statistics for 1970-1971 reported in the Factsheet on Institutional Sexism showed that women comprised 97.9% of preschool teachers and 84.3% of elementary teachers but only 21% of elementary principles and less than 1% of school superintendents (Fact Sheets on Institutional Sexism, 1976, p. 9). In addition, women accounted for less than 13% of schoolboard office holders and less than %5 of the chief state school officials (Fact Sheets on Institutional Sexism, 1976, p. 9).

Frazier and Sadker suggest how this male dominance at the top of the administrative hierarchy contributes to children's further sex-typing.

> ...the male boss in the form of the principal does emerge as an important figure. Whenever an issue is too big or troublesome for the teacher (usually female) to handle, the principal (usually male) is called upon to offer the final decision, to administer the ultimate punishment or reward...The teacher is boss of the class, the principal is boss of the teacher. And the principal is a man. In the child's mind associations form... (Frazier and Sadker, 1973, pp. 99-100).

The school also contributes to children's further sex-typing through administrative practices which are clearly sex-typed. Dress codes which require girls to wear skirts, separation by sex for school related activities, and inequity in sports programs for boys and girls are examples of such practices.

The school's role in stopping these sex-typing influences lies primarily in working toward a more equal distribution of the sexes at all levels of the organizational hierarchy. This would help to prevent the status differential between teacher and principal from becoming associated with male and female roles. It might also help in reducing sex-typed administrative practices, since it would mean that more women would occupy high level administrative positions. This is not to say that women administrators do not employ the same sex-typed practice as men--the selection process by which they got their positions and the institutional press which influences them while in these positions make it likely that they do. However, Lynn (1974) cites several references where men were shown to exert stronger sex-typing pressures on their children than women, so it is possible that women might be more amenable to non-sexist school policies than men. Moreover, research with children shows that boys are less receptive to programs aimed at changing sex-stereotyped attitudes than girls (Nash, 1974; Flerx, Fidler, and Rogers, 1976). If this holds true for adults, it would suggest that training programs aimed at developing the non-stereotyped attitudes needed to administer

non-sexist educational programs would be more effective with women. Women might thus be better candidates than men for administrative positions in school systems which are trying to promote non-sexist education.

Regardless of whether administrators are male or female, it is clear that attitude change programs will be necessary as a first step in eliminating sexist administrative practices. The equal distribution of males and females in the organizational hierarchy is not so straightforward a matter. Because of the way women are socialized, they may not be prepared professionally or personally for positions of administrative responsibility. On the other hand, male socialization practices may make men unwilling to accept the low status and low pay of positions lower in the organizational hierarchy. The problem thus becomes circular, with male dominance at the top of the hierarchy contributing to sex-typing which contributes to male domination at the top of the hierarchy. The solution therefore must combine efforts both to recruit and employ qualified women in higher positions and qualified men in lower positions and to change the sex-typed attitudes of children in the schools today so the cycle will be broken.

II. Children's Sex-Typed Attitudes

Active attempts to change children's sex-typed attitudes and values will also be necessary in order for the schools to be able to provide non-sexist education. We saw earlier that children are already sex-typed by the time they enter school, and it appears that sex-typing is a self-perpetuating process. There is evidence that once children acquire their respective gender identities (at about three to four years of age) they express strong sex-typed preferences for toys, activities, and objects (Kohlberg, 1966). Children have also been shown to be sex-typed in their play interests (Fling and Manosevitz, 1972), game preferences (Rosenberg and Sutton-Smith, 1972), identification of usage of school related objects (Hill, Hubbs, and Verble, 1974), and views of adult careers, family roles, and personality traits (Iglitzin, 1973). These sex-typed interests and preferences make it likely that even were the school able to neutralize all the sex-typing influences it normally exerts, children would continue to select sex-typed activities and materials based on their "Personal" preferences. As Levy suggests, "...the policy of allowing children to follow their own interests usually results in condoning the pervasive sex-typed activities the children have learned outside the school." (Levy, 1974, p. 145). To break this sex-typing cycle, the school will have to actively intervene to change the children's sex-typed attitudes and values.

In attempting to change children's sex-typed attitudes and values, the school must recognize that boys and girls come to school already different as a result of the sex-roles they have adopted and that the pressures on them to maintain their sex-roles are different. Boys are more strongly sex-typed than girls (Fling and Manosevitz, 1972; Nadelman, 1975; and Flerx, Fidler, and Rogers, 1976) and evidence of stronger sex-role socialization pressures on boys has been found with regard to the influence of both parents and peers. Parents are more concerned about cross-sexed behaviors in boys than girls (Fling and Manosevitz, 1975; Riding, 1972; Lanaky, 1967) while peers find "tomboys" more socially acceptable than "sissies" (Gray, 1957). Hartley (1967) suggests that because boys are socialized more proscriptively than girls, they experience more anxiety about deviating from their sex-role, thus accounting for boys' "...virtual panic at being caught doing anything traditionally defined as feminine..." (Hartley, 1972, p. 93).

This avoidance of the feminine causes great difficulty for boys in elementary school. Not only are 84% of elementary teachers female (Fact Sheets on Institutional Sexism, 1976, p. 9), but as Lee and Kedar (1976) point out, "An examination of the characteristics of sex role and pupil role indicates that there is a strong correspondence between pupil role and the female sex role" (Lee and Kedar, 1976, p. 10). This means that when teachers are trying to reinforce the pupil role, they are reinforcing same-sex behaviors in girls and cross-sexed behaviors in boys. For example, dependency is considered to be a feminine trait (lee, 1973, p. 80) but it also appears to be part of the desired pupil role. Etaugh and Hugher (1975) asked teachers in grades 5-8 to rate two hypothetical school children on how much they approved of the child's behavior. One child was described as aggressive and the other as dependent and the descriptions were alternately paired with male and female names. The results indicated that both males and female teachers in both middle- and lower-socioeconomic settings approved of dependency more than aggression for both boys and girls. Levitin and Chananie (1972) asked first and second grade teachers to rate two hypothetical children, each of whom was described as performing one of three different behaviors--dependency, aggression, or achievement. Each type of behavior was alternately paired with a male or female name. The results indicated that teachers clearly preferred dependent to aggressive behavior regardless of the sex of the child.

There is also evidence that teachers tend to reinforce feminine behaviors in both boys and girls. Etaugh, Collins, and Gerson (1975) used a checklist of 27 play behaviors and four types of consequences to examine the reinforcement of sex-typed behaviors in 16 two-year-old children in a nursery school setting. They found that the teachers reinforced a significantly greater proportion of feminine behaviors than masculine behaviors for both boys and girls. Fagot and Patterson (1969) looked at play behaviors and consequences for 36 3- to 4-year-old

children in two nursery schools. They found that the teachers reinforced girls a total of 363 times for sex-preferred behaviors and that 252 of these behaviors were feminine. For boys, they recorded a total of 232 reinforcements for sex-preferred behaviors of which 199 were for feminine behaviors.

It seems clear that the conflict between the masculine sex-role and teachers' reinforcement of a feminized pupil role must result in either boys' adoption of more feminine behaviors or their rejection of the feminized pupil role and thus their alienation from school. The reinforcement of cross-sexed behaviors for boys does not seem to be related to increased feminine behavior. Fagot and Patterson noted that "...the teacher reinforcement of feminine behaviors did not affect the boys' preference for masculine behaviors. Evidently the combination of peer reinforcement plus reinforcement received at home is adequate to maintain masculine behaviors" (Fagot and Patterson, 1969, p. 567). Ross and Ross (1972) looked at the influence of teachers' toy recommendations on children's toy choices and found that preschool boys tend to resist sex-inappropriate behaviors.

On the other hand, there is evidence that boys tend to feel alienated from school. Vroegh (1976) reviewed the research on teacher sex and pupil sex and found that elementary school children perceived their teachers to be more favorable to girls than boys. Hill, Hubbs, and Verble (1974) asked kindergarten, 2nd, and 4th grade students to indicate whether certain school related objects were used by boys or girls. They found that kindergarten girls were unsure who used the objects but that by 4th grade, girls consistently responded that most of the school-related objects (maps, books, blackboards, etc.) were used by girls. They found that kindergarten boys thought that boys used the objects more often than girls, but by the fourth grade, the boys thought an equal number of objects were used by boys and girls. The researchers concluded that the data suggested a growing undertainty on the part of boys as to the appropriateness of school for boys. Lee (1973) cites a literature review by Jackson (1968) in which it was concluded that boys are consistently more negative in their feelings toward school than girls are.

As a result of this alienation, it appears that boys learn to rely on the approval of peers, who reinforce masculine stereotyped behavior, rather than the approval of teachers, who reinforce feminized standards of pupil behavior. Dweck and Bush (1976) reviewed several studies on peer relationships. They found that grade school boys were significantly more peer oriented than girls and that, "...to gain the approval of peers, it might be necessary for boys to violate adult standards of socially desirable behavior" (Dweck and Bush, 1976, p. 149). They further found evidence to suggest that, over time, boys become increasingly more likely to choose peer approval over adult approval.

The implications of these findings for changing the sex-typed attitudes of boys is clear. Because of their alienation from school and their reliance on peers, they will not be as responsive as girls to teacher-conducted, school-related programs aimed at changing their attitudes. There is evidence that this is the case. Guttentag and Bray (1976) trained teachers in kindergarten, fifth, and ninth grades to present a 6-week nonsexist curriculum intervention aimed at changing their students' sex-typed attitudes. They found that at every grade level, girls were more open to the intervention than boys. Results indicated that while kindergarten boys showed some attitude change, fifth grade boys showed little and ninth grade boys appeared to have even more rigidly stereotyped attitudes after the intervention than before. Flerx, Fidler, and Rogers (1976) found that with 4- and 5-year-olds, brief presentations of stories involving egalitarian sex-role models were more effective in ameliorating sex-role stereotypes for females than for males. Nahs (1974) found that a 6-week sex-role awareness course designed to reduce sex-role stereotyping and sex-role anxiety had greater impact on girls than on boys so that the intervention had a polarizing effect on the attitudes of boys and girls in the experimental group.

These findings suggest a role for the school which appears paradoxical. The school will need to cater to boys' sex-typed masculine role in order to change their sex-typed attitudes; i.e., the match between the pupil role and the masculine role will have to be improved so that boys will be less alienated from school and thus more receptive to nonsexist interventions. One of the primary suggestions for improving the match between pupil role and male sex role is to provide more male teachers.

From the evidence available, it is not clear whether male teachers promote a more masculine pupil role than female teachers. Goebes and Shore (1975) asked male and female teachers to rate the ideal student, the typical girl and the typical boy on a semantic differential consisting of 12 bipolar adjectives. Their results indicated that female teachers viewed the behavior of girls as significantly closer to the ideal student than did male teachers. This implies that male teachers might reinforce a more masculine pupil role than would female teachers, thus reducing the role conflict for boys in school.

However, findings related to teacher sex differences in the reinforcement of sex-typed behaviors are mixed. Etaugh and Hughes (1975) asked male and female teachers in grades 5-8 to rate hypothetical children on their approval of the child's sex-typed characteristics. The results indicated no teacher sex differences, with both male and female teachers approving of dependency more than aggression for both boys and girls. Etaugh, Collins, and Gerson (1975),

on the other hand, compared observations of male and female preschool teachers and found that the male teacher dispensed 33% of the rewards given for masculine behaviors as compared to an average of 17% for each female teacher. Feminine behaviors were rewarded equally often by male and female teachers. This would suggest that there are teacher sex differences in the reinforcement of masculine sex-typed behaviors. This whole issue is made even more complex by Fagot's suggestion, based on her 1975 study, that the amount of teaching experience rather than teacher sex accounts for differences in the reinforcement of sex-typed behaviors.

Evidence concerning teacher sex differences in the overall treatment of boys and girls is also contradictory. Good, Sikes, and Brophy (1973) observed teacher-student interactions in sixteen 7th and 8th grade classrooms. They found no support for the idea that teachers favor students of their own sex and concluded that the sexes are treated differently but in the same ways by both male and female teachers. On the other hand, Lee and Wolinsky (1973) found evidence of same sex bias in male and female teachers. They observed teacher-student interactions in 18 classrooms from preschool through second grade. The results indicated several teacher sex differences in the treatment of boys and girls: (1) female teachers assigned leadership positions to girls twice as often as to boys, while male teachers assigned leadership positions to boys four times as often as to girls; (2) female teachers were twice as evaluative of the children as male teachers were; (3) female teachers approved more than disapproved of girls, and disapproved more than approved of boys, while male teachers were equally approving and disapproving of boys, and hardly evaluated girls at all; and (4) female teachers tended to focus on neutral activities while male teachers tended to relate to male sex-typed activites.

Further research is needed to determine whether male teachers differ from female teachers in their treatment of male and female students. However, even clear evidence that male teachers treat their students differently than female teachers would not necessarily mean that having more male teachers is the only or the best solution. It might mean instead that teacher behaviors identified as promoting a more masculine pupil role should be taught to and encouraged in all teachers. For example, Tregaskis (1972) administered a masculinized reading treatment to 78 first grade boys and found that the treatment seemed to be effective in counteracting the tendency of the first grade school setting to engender a feminine sex-typing of reading. The treatment consisted of: (1) a weekly 20-minute exposure to a narrated slide presentation showing male figures in prestigious roles promoting reading; (2) middle-school males tytoring in reading; and (3) beginning reading materials that contained stories written and illustrated so as to have particular appeal to boys. This treatment could as easily be employed by female as by male teachers.

If, on the other hand, boys respond differently to male teachers because of their sex per se, then recruiting more male teachers would be important. Kohlberg suggests that "...the boy prefers and imitates masculine roles and models because he feels they are 'like self'..." (Kohlberg, 1966, p. 136). There is some evidence that this could be the case, but it is only suggestive. Brophy and Laosa (1973) examined the effects of a male teacher on the sex-typing of 176 kindergarten children. Only a few of the measures employed over a 2-year period showed group differences. This result led the researchers to conclude that male teachers have little effect on children's sex-typing. It must be noted, however, that the comparison in this study was between a female-taught class and a class taught by a husband/wife team. The types of experiences provided in the classes were also very different so that the sex-of-teacher effect may have been both attenuated and confounded with differential practice effects in this study. Lee and Wolinsky (1973) interviewed 72 children taught by males and females in 18 classrooms from preschool through second grade. The findings revealed a tendency for the boys to affiliate with the males and to perceive themselves as being preferred over girls by male teachers. Portuges and Feshback (1972) looked at 3rd and 4th graders' modeling of teachers' incidental gestures from films. They found that girls modeled significantly more than boys and that preference for teacher and imitation were significantly related for advantaged boys. Since the teachers in this study were female, the results are consistent with same sex modeling theories. These same theories would predict that boys would model male teachers more. The present finding that boys imitated the teacher they like better, combined with Lee and Wolinsky's finding that boys tend to affiliate with male teachers, also suggests that boys would model male teachers more. Smith (1970) compared the responses of 280 5th-grade boys with male teachers to the responses of 287 boys with female teachers on several measures. He found that boys with male teachers had significantly lower scores on psychological effeminacy and significantly higher scores on all the school-related self-concept factors.

It appears, then, that efforts to decrease boys' alienation from school should be directed both towards teaching male and female teachers specific behaviors for promoting a more masculine pupil role and towards recruiting more male teachers in preschool and elementary education. According to Lee and Kedar, masculinizing the pupil role should also be beneficial for girls who are "...victimized by the close fit between pupil role and their sex role. They are in a sense, locked into cumulatively reinforcing cycles of passivity, docility, and dependence and many eventually come to accept passivity as the proper stance for learning" (Lee and Kedar, 1976, p. 10). Masculinizing the pupil role should thus help make boys more receptive to nonsexist interventions while serving as a direct intervention for girls. Providing more male teachers should serve as a

direct intervention for boys. However, providing more male teachers for boys to model could be a counterproductive move if the male teachers themselves are sex-typed. Evidence that boys are more strongly sex-typed than girls (Fling and Manosevitz, 1976; Nadelman, 1975; and Flerx, Fidler, and Rogers, 1974) and that fathers exert the stronger sex-typing pressure on their children (Lynn, 1974) suggests that this situation is a possibility. Thus is is important that the male teachers recruited for their special influence with boys also be nonsexist so that the influence they exert on those boys (and girls) be in a direction consistent with the non-sexist goals of the school.

Summary

This summary, prepared by the authors of the paper, presents their interpretation of the research they have reviewed in the area of sex role socialization, their understanding of these findings for school programs, and their recommendations for further research to clarify the many issues that remain unresolved.

I. Research Findings

Sex Differences

1. Evidence is strong that at least by the age of 2 1/2, boys are more aggressive than girls.

2. There is evidence indicating that boys are probably more active than girls by age 3, especially in the presence of peers.

3. Girls appear to be more compliant with the demands of adults than boys are.

4. Boys appear to be more sensitive to the large peer group than girls are.

5. Boys are sex-typed earlier and more strongly than girls.

6. By age two or three, both sexes show sex-typed toy and activity preferences.

7. There is tentative evidence suggesting that girls are more dependent on the appraisals of adults than are boys.

8. Because of the tendency to lump various aspects of dependency together and to omit from consideration other possibly crucial aspects of depandence and independence, it is impossible at this time to make any clear statement about whether or not girls are more dependent than boys.

Family Influences

1. Boys experience more intense pressure in sex role socialization experiences than girls in that they are subjected to many more negative sanctions from their parents for engaging in sex-inappropriate behavior.

2. Parents physically punish boys more often than girls. Research regarding relative amounts of other types of punishment do not appear to be clearly influenced by the child's sex.

3. There are no clear-cut results regarding parents' differential socialization practices in independence-granting or in the socialization of dependence.

4. Fathers and mothers tend to differ in their relative emphasis on cognitive achievement in boys and girls. While mothers tend not to differentiate between boys and girls in pressure for achievement, fathers tend to place more emphasis on achievement with their sons.

5. Parents begin to exert sex-typing pressure (via toy and activity selection) before their children readh age 3. Their toy choices for their young children tend to be geared toward maximizing trait differences between boys and girls.

6. Fathers have been shown to be the primary promoters of sex-typed behavior in their children.

7. Modeling of same sex parents is a probable source of direction for sex role development. The degree of importance of this source appears to be dependent on such mediating variables as nurturance, dominance, and availability of the model. It is also probable that the adult model plays a greater role in the sex role development of girls than boys. Cognitive development seems to influence the tendency to model after non-parent models.

8. Older siblings have been shown to influence sex role development of younger siblings. Most studies have shown that the younger sibling tends to be influenced in the direction of the sex of the older sibling. There are some discrepant findings thought to relate to specific traits measured and there is evidence that older brothers are more influential than older sisters.

9. First born children are the most likely to be strongly sex-typed. To the extent that population control aims at increasing the numbers of one-child families, there may be a trend against sex role equality.

10. Evidence suggests that the loosening parental role differentiation, when in the context of nurturant and stable parenting, decreases sex typing and is not harmful to mental health or sex role development.

11. It appears that extreme dominance in the home by either parent is not good, but that mother dominance may be especially unhealthy for the sex role development of the children.

12. Maternal employment appears to influence girls in the direction of less stereotyped sex role attitudes whild having little effect on boys. Socioeconomic status plays an important role in the effects of maternal employment.

13. Father-absence appears to have a negative influence on sex role development, mental health, and cognitive and academic functioning of children, particularly low SES children. To what extent the effects of father-absence are due to the lowering of economic status of the female-headed as compared to the male-headed household remains undetermined.

Media Influences

1. Females are grossly under-represented in television programs of all kinds.

2. Females in television programs are portrayed in restricted roles and occupations and are portrayed as less autonomous, independent, and competent than males.

3. Men and women are presented differently in television advertising and each sex is still shown in traditional roles that do not reflect recent trends and change in the real world.

4. Younger children show relatively greater attitudinal and behavioral effects from television viewing than older children.

5. The amount of television viewing is greater for persons who are black, are from families of lower SES, lower academic achievement, and lower I.Q.

6. The evidence of the possibility of observational learning from television of a variety of classes of behavior, both socially desirable and antisocial, does not imply automatic adoption of those behaviors.

7. The treatment of females in children's books differs from that of males in both quality and quantity.

School Influences

1. Evidence indicates that children come to school already sex-typed.

2. There is some evidence that teachers have different expectations for boys and girls based on traditional sex role definitions and that they treat the sexes differently based on these expectations.

3. There is some evidence which suggests that teachers treat boys and girls differently by responding to objective differences in behavior which children of the two sexes display.

4. Research on textbook content reveals large differences in both the number and nature of character portrayals by sex. Females are underrepresented, portrayed in restricted roles and occupations, and endowed with inferior characteristics.

5. There is some evidence that children's attitudes can be influenced by the content of reading textbooks.

6. It is clear that although elementary education is considered to be primarily a female occupation, the positions higher in the power hierarchy are held predominantly by men.

7. The role expected of a good pupil coincides to a large degree with the conventional role expectations of girls but conflicts with the stereotypical role expectations of boys.

8. Research indicates that teachers tend to reinforce feminine behaviors in both boys and girls.

9. Evidence indicates that boys tend to resist sex-inappropriate behaviors.

10. There is evidence that boys tend to feel alienated from school.

11. Research indicates that interventions aimed at reducing sex-typed attitudes are less effective with boys than with girls.

12. It is not clear whether male teachers promote a more masculine pupil role than female teachers.

13. Evidence regarding teacher sex differences in the reinforcement of sex-typed behaviors in boys and girls is mixed.

14. Evidence on teacher sex differences in the overall treatment of boys and girls is contradictory.

15. There is some very tentative evidence suggesting that male teachers may have a positive modeling effect for boys.

II. Implications for School Programs

Family

1. The evidence on the amount of sex-typing that takes place before the child comes to school points to the importance of attempting to influence parents.

2. Since fathers tend to be more sex-typed than mothers, they are more likely to raise objections to the fostering of androgyny in the schools. This suggests that the fathers must be made partners to shifts in school attitudes and policies.

3. Families should be encouraged to ease up on the excessive sex role pressure placed on boys so that boys will be more free to adopt androgynous roles. Parents, especially fathers, should be educated to avoid differential sex-typing pressures and to allow boys to play house, dolls, cooking, and sewing just as freely as they allow girls to play cars, cowboys, and cops and robbers.

4. Since fathers exert the stronger sex-typing influence in the family, the school should put strong emphasis on working with fathers in their attempts to influence children's sex-typed attitudes.

5. The school can play an important role in providing group support and concrete suggestions for parents wrestling with the problems of allowing their boys greater sex role freedom.

School

1. Differences in teacher treatment of boys and girls based on teachers' sex-typed attitudes, points to the need for programs which would help teachers examine and change their sex-typed attitudes.

2. Differences in teacher treatment of boys and girls based on differences in behaviors the children themselves display calls for interventions to sensitize the teachers to their behavior and interventions to alter the children's sex-typed attitudes.

3. Recommendations for dealing with sex-typed classroom materials include: (a) avoiding the use of sex biased materials whenever possible, (b) forming pressure groups to lobby publishing companies for more equal treatment of the sexes in classroom materials and (c) using sex biased materials as teaching aids to teach about sex bias.

4. To counteract the sex-typing influences of the school's own organizational hierarchy, an attempt should be made to work towards a more equal distribution of the sexes at all levels in the organizational hierarchy.

5. Elimination of sexist administrative practices in the school calls for attitude change programs for administrators.

6. Because of boys' feelings of alienation from school and their reliance on peers rather than on adults, intervention programs aimed at changing sex-typed attitudes are not likely to be effective for boys.

7. It appears that the school will need to increase the match between pupil role and masculine sex role so that boys will be less alienated from school and thus more receptive to nonsexist interventions. This masculinized pupil role should also be beneficial for girls.

8. Efforts to masculinize the pupil role should be directed both towards teaching male and female teachers specific behaviors for promoting a more masculine pupil role and towards recruiting more male teachers in preschool and elementary education.

9. It is important that male teachers recruited for their special influence with boys be nonsexist so that the influence they exert is in a direction consistent with the nonsexist goals of the school.

III. Recommendations for Further Research

Family

1. Further research investigating the nature and importance of same sex parent modeling in the development of the child's sex role should take into account such variables as parental nurturance and dominance.

2. Further research is needed to determine under what conditions parents serve as effective sex role models and at what age and under what conditions peers or media become the primary sources of sex role learning and acquisition. Also of intrest are the ages at which children start imitating nonparent same sex adults, the types of activities or values they imitate and what types of models are most imitated.

3. Recent research has distinguished three aspects of sex role development (sex role orientation, preference, and adoption) and has shown them to be imperfectly correlated. More research on sex role modeling is needed which considers each of these aspects separately.

4. More research on the effects of maternal employment is needed which takes into account the status of mother's job, her job satisfaction, and the father's attitude toward the mother's employment.

5. More research needs to be directed at the mechanism underlying the effects of maternal employment on children's sex role attitudes.

6. Further research is needed on the effects of education toward androgyny on father-absent children.

7. The importance of surrogate male models in sex role development needs further investigation.

8. In order to determine how much sex-typing is optimal, a new body of research data is needed which looks at the relationship between the degree of androgyny and anxiety level, self-concept, school achievement, peer-relationship, heterosexuality, adult occupation adjustment, age, socioeconomic level and parental role differentiation.

9. Further research is needed to assess the correspondence among the following measures across various ages of children and socioeconomic levels: (1) what parents say they would like for their children regarding trait and sex-typing and how strongly they feel about this, (2) how parents describe their own behavior and that of their children, and (3) what parents actually do (observational measures).

10. Further research should address itself to the parents' role in the school's response to sex differences in need for adult approval, proximity seeking, environmental competence, competitive and dominance behavior and activity level.

11. It is important that future research on sex role development put more emphasis on inclusion of fathers.

12. More research is needed to determine areas of socialization in which fathers are dominant and those in which mothers are dominant.

Media

1. More scientifically reliable measures of actual influence of the media on behavior and attitudes are needed as well as research methodologies which can provide more situationally specific definition of the influence of the media.

2. Both male and female stereotypes predominate the mass media. More research is needed to determine whether changes in the quantity and quality of female and male roles will result in different socialization influences.

3. The relative influence of mass media as opposed to influences in the home, the school and other institutions needs further investigation.

School

1. More research is needed to determine specific ways in which teachers treat boys and girls differently and to assess the effects of such treatment differences.

2. More research is needed to determine whether there are areas in which differences in teacher response to boys and girls are based on innate sex differences in the behaviors boys and girls exhibit.

3. Further research is needed to determine whether male teachers promote a more masculine pupil role than female teachers.

4. An important area for further investigation is whether male and female teachers treat boys and girls differently and if so, in what specific ways.

5. Further research is needed to determine whether male teachers have a special role modeling value for boys.

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